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HEADQUARTERS

Dixell, situated in Pieve d'Alpago (Belluno) and now part of the **Emerson Climate Technologies Group**, is a dynamic Company that from the year 1996 to present has positioned itself among world leaders of electronic Regulation and Control in **Industrial and Commercial Refrigeration**, **Conditioning and Cooking** fields thanks to continuous **Technologic Innovation** and a **focus on Energy Saving** issues.



SALES, TRAINING

Worldwide, our products are distributed and supported in **over 70 countries**, by a sales network of experienced and **qualified personnel**, guaranteeing the correct selection of controllers and an efficient after sales service. Competence, professionalism, and courtesy make our Customer Service Dept exemplary. It provides our distributors and customers alike with technical support, solutions and concise answers to issues that may arise. Constant **technological development and innovation** of our products make us stand out in the market as the strategic choice for most users. This and the continuous growth of our product range requires constant training for our own staff and our distributors. To meet this challenge a fully equipped training facility with the most advance computer technology has been developed at our Belluno base.



IPRO ACADEMY

A center of excellence that combines innovation requests received from the HVAC/R market combined with technological opportunities, in this way guaranteeing continuous **iPro programmable platform** growth.





RESEARCH, DEVELOPMENT, PRODUCTION

Continuous **research and development** means that all of our controllers feature the latest generation of microprocessors. Giving due consideration to the actual needs of many users has lead us to develop Dixell's fast and simple programming methods. Most operating features are carefully developed through listening closely to the requirements of our many users. Our "Research and Development" and our "Production" departments are highly flexible, which means they can respond quickly to specific customer requirements and offer appropriate solutions, now even more competitive and flexible thanks to China bases. Highly sophisticated equipment is now employed in the development and control of manufacturing. Here delicate and repetitive tasks are mostly carried out by "state of the art" **automatic systems**.



QUALITY

Dixell has been awarded with ISO9001 certificate and it constantly commits itself to quality in everything it does. The quality system of Dixell conforms to the Quality System Standard **UNI EN ISO 9001:2008**.



ENVIRONMENT

Dixell firmly believes in the **respect and safeguard of the environment**, with particular attention to all industrial processes and to the research and development of new products.

Dixell's strengths are the realization of regulators that combine high performance with high **energy savings** and the use of eco-friendly components, in full compliance with all Italian and International laws and standards. To this end Dixell complies with the Material Compliance Program of Emerson respecting the **RoHS** directive (2002/95/EC) and the **REACH** regulation (**CE n. 1907/2006**), asking its suppliers accurate analysis on all purchased components. Furthermore packing materials are in accordance with 2004/12/CE European Directive.





REFRIGERATION

Refrigeration requires the control of many different conditions to guarantee that products are processed and stored correctly. Temperature, pressure and humidity must be monitored with reliable devices that are also simple to manage. Whether we are dealing with a **compressor rack controller** or the **smallest refrigerator** or **refrigerated transport**, controllers must provide total solutions that provide complete control.

Often, hidden behind a **bottle cooler** or **pharmaceutical cabinet**, lies the electronic technology which is nowadays required, which is becoming more important and plays a decisive role, both for the designer and for the consumer. The concepts of integration, remote access, energy savings, functional aesthetics and connectivity are important considerations on which even the **wholesaler** can always rely on. Even regarding **catering** and **food service**, Dixell has years of experience in offering products with excellent performance and durability including special applications such as **blast chiller** processes used in freshly-cooked food conservation. Dixell's solutions to the introduction of food hygiene regulations (HACCP) offer immediate advantages in terms of cost, time and system operation.







RETAIL

The complete solution that Dixell offers for the Retail field is a solution for every kind of application, from **petrol station** to **hypermarket** up to **convenience stores**. If there is an alarm, it is necessary to be advised quickly in order to intervene without delay. Depending on the application, Dixell provides remote assistance systems for local monitoring, for supervising or remote control including via Internet. Where there are many points of sale, such as **restaurant chains** or **distribution centers**, centralized management software for the Call Center is available.



CONTRACTING

Experience, combined with innovation, allows our products to be used in the most diverse **industrial applications**; alarm management is very important for safety and this is why all the controllers are designed to supply effective diagnostics whether at local level or by connection to remote assistance system. Dixell devices are particularly adaptable and make the application easy to use even in the **industrial automation** field, thanks to the wide range of products available and their compatibility with current safety standards.



INFO

For **further information** about all Dixell products please check out our Web Site **www.dixell.com**.





PARAMETRIC CONTROLLERS

Different needs that crowd the refrigeration world are satisfied with a complete series of parametric controllers with an innovative design and intuitive interfaces. Intelligent algorithms, most of those are oriented toward the **energy saving**, and **innovative functions** mark a range of products that includes different fields of cooling world giving a wide range of general purpose solution, for multiplexed cabinets, cabinets and rooms, bottle cooler, blast chiller, compressor racks and refrigerated trucks. Specific solutions that are used also in applications such as pharmaceutical or fan speed, food warming cabinets and ovens control and in temperature, humidity and pressure regulation.



PROGRAMMABLE CONTROLLERS

The iPro family of controllers, whether dedicated for HVAC/R units or for general purposes, is characterized by the most advanced technology in **connectivity** and processing speed.

iPro controllers are based on a powerful platform that includes one hardware configuration that is able to expand the actual solution in the market, and software that, thanks to the ISaGRAF® development environment, allows the development through standard programming languages.

An **easy** and **useful HMI** is also guaranteed through graphic displays and the touch screen, as the **expandability** and the solution to many applications are satisfied with a complete range of accessories, including I/O expansion modules, proportional electronic valve management, modem, wirings, and more.





SYSTEMS

The XWEB System family is based on web technology used to satisfy monitoring and supervising requirements in Commercial and Industrial Refrigeration fields from small shops to hypermarkets, and refrigerated warehouses to food production centers. Other potential fields are: chemical-pharmaceutical, oenological, naval, museums, hospital, etc. Dixell Systems conform to HACCP rules; the CRO (compressor rack optimization) reduced Set-point, anti-sweet heaters, lights and the power peaks are used with the result of having an optimize energy savings. It is also important to have the possibility to have integration with air conditioning machines that are equipped with iCHILL and iPro Dixell controllers. For retrofitting we offer ICOOLL wireless (RF) modules plus relay and acquisition module families for probe inputs and alarm outputs. All XWEB's can be connected anywhere with XCENTER, the program for the centralized management for a modern and organized Call Center, dedicated to alarm management and for a pro-active Service based on the Oracle database.



PROBES and ACCESSORIES

A complete series of probes & transducers for temperature, humidity, and pressure ensures that for every application the end user has the right level of accuracy and the appropriate lead time.

A family of useful accessories such as modems, wirings, serial interfaces, programming kits, and protections makes it easy, fast, and accurate to use each instrument in every situation, especially with a remote connection or for energy analysis.



CORPORATE and HOMOLOGATIONS

All the production conforms to **CE** norms with regards to low voltage and electromagnetic compatibility. For many models, Dixell has the voluntary mark at approval Authority (**ENEC**, **usULc**) ensuring a reliable international rules conformance.



CE mark

It indicates conformity to the European Directives issued to guarantee the safety of the users and the environment. It is obligatory for all products distributed within the European Community. It does not replace the voluntary Quality Mark.



ENEC mark

Voluntary quality mark recognised as equivalent to the single national marks of the Countries adherent to the accord. It certifies that a product conforms to the European norms EN, and that it has been manufactured by a company with quality systems conforming to ISO 9000 norms.



UL mark

Voluntary quality mark, valid for the American Market. It certifies conformity of a product to the American safety directives, which sometimes differ from European ones.



GOST-R

Voluntary certificate valid for the Russian Market. It certifies quality of supplied goods and their conformity with norms and standards Russian Federation.



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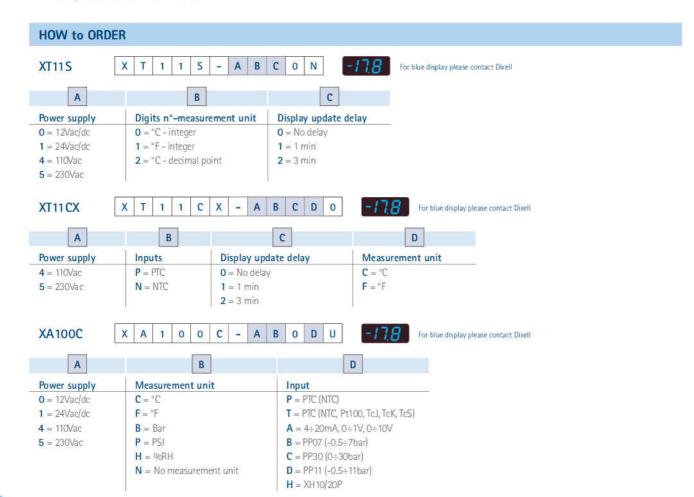
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THERMOMETER: TEMPERATURE DISPLAY

- · Measurement unit integrated on the display
- Hot Key or Prog Tool Kit connector for quick and easy programming (XA100C and XT11CX)
- 3VA max power absorption
- Display with red LED 11,5mm high (S format) or 13,2mm high (C and CX formats)
- Temperature alarm (XT11CX)



LED THERMOMETERS

THERMOMETER

XT11S XT11CX

Digital thermometers with max and min log, powered directly by main voltage

XA100C

Configurable digital indicator



CX: 32x74mm



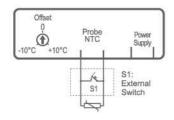


C: 32x74mm

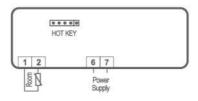
S: 31x64mm

| FEATURES | XT11S | XT11CX | XA100C |
|---|-----------------------------|-----------------|---|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Power supply | 12, 24Vac/dc 110, 230Vac | 110, 230Vac | 12, 24Vac/dc 110, 230Vac |
| Measurement range | -40÷50°C -40÷122°F | probe dependent | probe dependent |
| Inputs | | | |
| Probe | NTC included | NTC, PTC | NTC, PTC, Pt100 TcJ, TcK, TcS 4÷20mA, 0÷1V, 0÷10V |
| Other | | | |
| Temperature alarm Hot Key/Prog Tool Kit output Digital input Serial output Buzzer | | pres pres | pres pres TTL opt |
| Offset adjustment | back side trimmer | via keyboard | via keyboard |

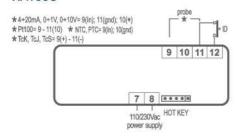
XT11S

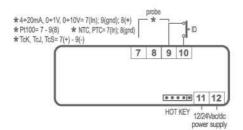


XT11CX



XA100C



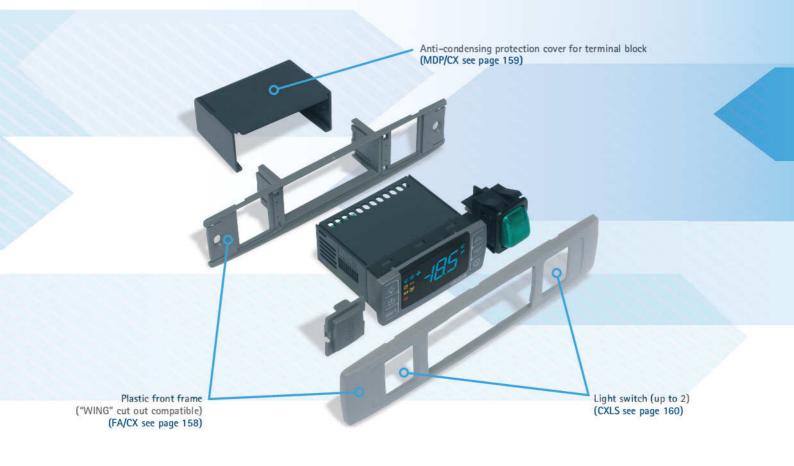


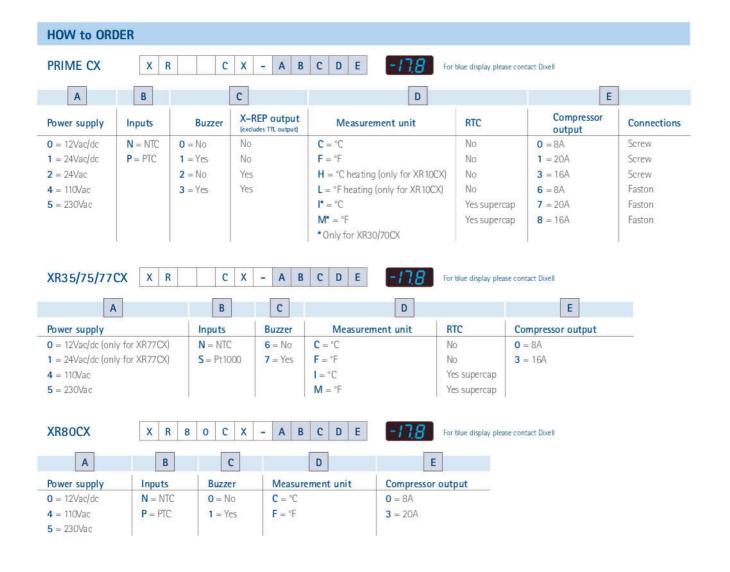


PRIME CX SERIES: NT and LT APPLICATIONS

- Innovative digital controllers dedicated to heat and NT and LT refrigeration
- Easy and intuitive programming mode
- On/off key
- · Energy saving cycles through digital input
- · Fast freezing with dedicated set point
- Outputs restart with door open alarm
- Temperature Max and Min functions
- · Configurable digital input also as probe
- · Virtual probe management
- · Cycles for milk cooling and storage systems
- · Functions for refrigerated air dryers in automation processes
- Condenser temperature management to prevent critical plant situations
- · Hot Key or Prog Tool Kit connector for quick and easy programming
- Serial connection to monitoring systems (direct for XR35/75/77CX or via XJ485CX)
- Connection for X-REP remote display (alternative to TTL output)
- 3VA max power absorption
- · Display with red LED (10,5mm high) and icons







PRIME CX

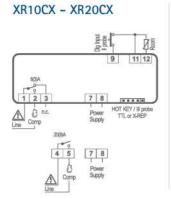
THERMOSTAT and CONTROLLERS with "OFF CYCLE" DEFROST for STATIC APPLICATIONS

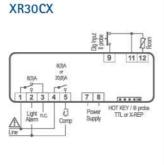


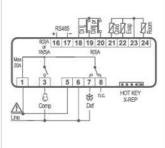
CX: 32x74mm

| XR10CX | Digital thermostat with heating or cooling action |
|--------|---|
| XR20CX | Digital controller for NT with "off cycle" defrost |
| XR30CX | Digital controller for NT with "off cycle" defrost and additional configurable relay |
| XR35CX | Digital controller for NT with "off cycle" defrost, additional configurable relay and RS485 |
| YRANCY | Digital controller for NT and IT with electrical or hot gas defrost |

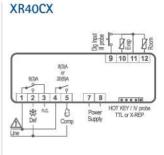
| FEATURES | XR10CX | XR20CX | XR30CX | XR35CX | XR40CX |
|---|---------------------------------|---------------------------------|---------------------------------|-------------|---------------------------------|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Power supply | 12, 24Vac/dc 24, 110, 230Vac | 12, 24Vac/dc 24, 110, 230Vac | 12, 24Vac/dc 24, 110, 230Vac | 110, 230Vac | 12, 24Vac/dc 24, 110, 230Vac |
| Probe inputs | | | | | |
| Thermostat | NTC, PTC | NTC, PTC | NTC, PTC | NTC, Pt1000 | NTC, PTC |
| Thermostat 2 | | | | | (5.00000) (MEXATA) |
| Defrost | | | | NTC, Pt1000 | NTC, PTC |
| Defrost 2 | | | | | |
| Condenser | NTC, PTC on HOT KEY | NTC, PTC on HOT KEY | NTC, PTC on HOT KEY | NTC, Pt1000 | NTC, PTC on HOT KEY |
| Digital inputs | | | | | |
| Alarm, start defrost, AUX, door switch, pressure switch, probe | config | config | config | config | config |
| Alarm, start defrost, AUX, door switch, pressure switch | | | | config | |
| Relay outputs | | | | | |
| Compressor | 8A, 20A | 8A, 20A | 8A, 20A | 8A, 16A | 8A, 20A |
| Compressor 2 | | | | | |
| Thermostat 2 | | | | | |
| Defrost | | | | | 8A |
| Defrost 2 | | | | | |
| Fans | | | orace . | 29434 | |
| Light or alarm | | | 8A | 8A | |
| Anti-sweat | | | | | |
| Agitator | | | | | |
| Other | | | | | |
| Hot Key/Prog Tool Kit output | pres | pres | pres | pres | pres |
| Remote display output | X-REP opt | X-REP opt | X-REP opt | X-REP | X-REP opt |
| Serial output | TTL | TTL | TTL | RS485 | TTL |
| Buzzer | opt | opt | opt | opt | opt |
| Real time clock | | | opt | opt | |







XR35CX



CONTROLLERS for STATIC or VENTILATED APPLICATIONS

PRIME CX

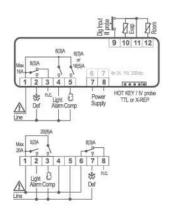
| XR50CX | Digital controller for NT and LT static applications with electrical or hot gas defrost and auxiliary relay |
|--------|---|
| XR60CX | Digital controller for NT and LT ventilated applications with dual humidity function |
| YR64CY | Digital controller for NT and IT ventilated applications with dual evaporators |



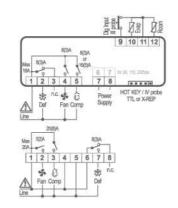
CX: 32x74mm

| FEATURES XR50CX XR60CX | | XR60CX XR64CX | | | | |
|--|---------------------------------|--------------------------|---------------------------------|--------------------------|--------------------------|--------------------------|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Power supply | 12, 24Vac/dc 24, 110, 230Vac | 110, 230Vac | 12, 24Vac/dc 24, 110, 230Vac | 110, 230Vac | 110, 230Vac | 12Vac/dc |
| Probe inputs | | | | | | |
| Thermostat Thermostat 2 | NTC, PTC | NTC, PTC | NTC, PTC | NTC, PTC | NTC, PTC | NTC, PTC |
| Defrost Defrost 2 | NTC, PTC | NTC, PTC | NTC, PTC | NTC, PTC | NTC, PTC NTC, PTC | NTC, PTC NTC, PTC |
| Condenser | NTC, PTC on HOT KEY | NTC, PTC on HOT KEY | NTC, PTC on HOT KEY | NTC, PTC on HOT KEY | NTC, PTC on HOT KEY | NTC, PTC on HOT KEY |
| Digital inputs | | | | | | |
| Alarm, start defrost, AUX, door switch, pressure switch, probe | config | config | config | config | config | config |
| Alarm, start defrost, AUX, door switch, pressure switch | | | | | | |
| Relay outputs | | | | | | |
| Compressor Compressor 2 Thermostat 2 | 8A, 16A | 20A | 8A, 16A | 20A | 8A, 16A | 16A |
| Defrost Defrost 2 | 8A | 8A | 8A | 8A | 8A 8A | 16A 16A |
| Fans Light or alarm Anti-sweat Agitator | 8A | 5A | 8A | 5A | 5A | 16A |
| Other | | | | | | |
| Hot Key/Prog Tool Kit output Remote display output Serial output | pres X-REP opt TTL | pres X-REP opt TTL | pres X-REP opt TTL | pres X-REP opt TTL | pres X-REP opt TTL | pres X-REP opt TTL |
| Buzzer Real time clock | opt | opt | opt | opt | opt | opt |

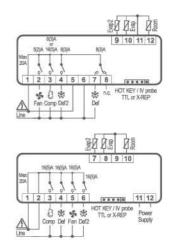
XR50CX



XR60CX



XR64CX



PRIME CX

CONTROLLERS for VENTILATED APPLICATIONS

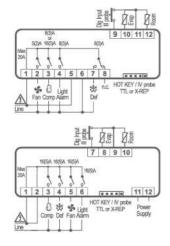


CX: 32x74mm

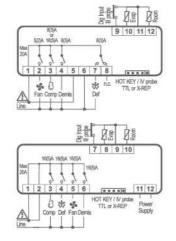
| XR70CX | Digital controller for NT and LT with auxiliary relay and dual humidity function |
|--------|--|
| XR71CX | Digital controller for NT and LT with anti sweat heater management |
| XR72CX | Digital controller for NT and LT with dual compressor management |

| FEATURES | XR | R70CX XR | | R71CX XR72CX | | 72CX |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Display: n° digits | ± 3 d.p. |
| Power supply | 110, 230Vac | 12Vac/dc | 110, 230Vac | 12Vac/dc | 110, 230Vac | 12Vac/dc |
| Probe inputs | | | | | | |
| Thermostat Thermostat 2 | NTC, PTC |
| Defrost 2 | NTC, PTC |
| Condenser | NTC, PTC on HOT KEY |
| Digital inputs | | | | | | |
| Alarm, start defrost, AUX, door switch, pressure switch, probe | config | config | config | config | config | config |
| Alarm, start defrost, AUX, door switch, pressure switch | | | | | | |
| Relay outputs | | | | | | |
| Compressor Compressor 2 Thermostat 2 | 8A, 16A | 16A | 8A, 16A | 16A | 8A, 16A 8A | 16A 16A |
| Defrost Defrost 2 | 8A | 16A | 8A | 16A | 8A | 16A |
| Fans | 5A | 16A | 5A | 16A | 5A | 16A |
| Light or alarm Anti-sweat Agitator | 8A | 16A | 8A | 16A | | |
| Other | | | | | | |
| Hot Key/Prog Tool Kit output Remote display output Serial output | pres X-REP opt TTL |
| Buzzer | opt | opt | opt | opt | opt | opt |
| Real time clock | opt | opt | | | -0.000000 | |

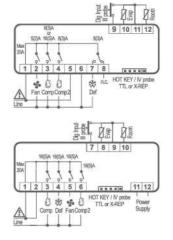
XR70CX



XR71CX



XR72CX



CONTROLLERS for VENTILATED APPLICATIONS or for MILK COOLING and AIR DRYERS

PRIME CX

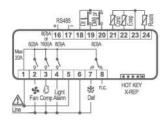
| XR75CX | Digital controller for NT and LT ventilated applications with auxiliary relay, dual humidity function and RS485 |
|--------|--|
| XR77CX | Digital controller for NT and LT ventilated applications with auxiliary relay, dual humidity function, RS485 and relay with separated common lines |
| XR80CX | Digital controller for storage, milk cooling, and for refrigerated air dryers |



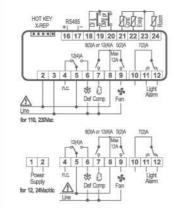
CX: 32x74mm

| FEATURES | XR75CX | XR77CX | XR80CX |
|---|-------------|-----------------------------|-------------------------|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Power supply | 110, 230Vac | 12, 24Vac/dc 110, 230Vac | 12Vac/dc 110, 230Vac |
| Probe inputs | | | |
| Thermostat Thermostat 2 | NTC, Pt1000 | NTC/Pt1000 | NTC, PTC |
| Defrost Defrost 2 | NTC, Pt1000 | NTC, Pt1000 | |
| Condenser | NTC, Pt1000 | NTC, Pt1000 | |
| Digital inputs | | | |
| Alarm, start defrost, AUX, door switch, pressure switch, probe | config | config | |
| Alarm, start defrost, AUX, door switch, pressure switch | config | config | config |
| Relay outputs | | | |
| Compressor | 8A, 16A | 8A, 12A | 8A, 20A |
| Compressor 2 | | | |
| Thermostat 2 Defrost | 8A | 12A | |
| Defrost 2 | 8A | IZA | |
| Fans | 5A | 5A | |
| Light or alarm | 8A | 7A | |
| Anti-sweat | 100 | | |
| Agitator | | | 8A |
| Other | | | |
| Hot Key/Prog Tool Kit output | pres | pres | pres |
| Remote display output | X-REP | X-REP | |
| Serial output | RS485 | RS485 | TTL |
| Buzzer | opt | opt | opt |
| Real time clock | opt | opt | |

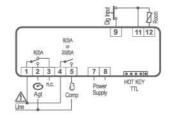
XR75CX



XR77CX



XR80CX





PRIME D SERIES: NT and LT APPLICATIONS

- Innovative digital controllers dedicated to normal and low temperature refrigerated applications
- Direct line power supply 230 (110) Vac. No external transformer required
- · Direct driving of compressors up to 1,2HP, (20A relay inside)
- Pre-programming of the main control variables, easy and intuitive programming mode
- · Keyboard lock, alarm signalling by relay, display or buzzer
- · Configurable digital input for door swtich, defrost, general or serious alarm
- · Auxiliary relay activated through keys or digital input
- · Hot Key connector for quick and easy programming
- HACCP function
- 3VA max power absorption
- Display with red LED (13,2mm high)

HOW to ORDER D - A B C D E PRIME D X R For blue display please contact Dixell Α D Е Compressor output Measurement unit Power supply Inputs Buzzer P = PTC **0** = No 0 = 8A 2 = 24Vac C = °C N = NTC4 = 110Vac 1 = Yes F=°F 1 = 20A $H = ^{\circ}C$ heating only for XR10D 5 = 230Vac L = °F heating only for XR10D

THERMOSTAT and CONTROLLERS for STATIC or **VENTILATED APPLICATIONS or for MILK COOLING**

PRIME D

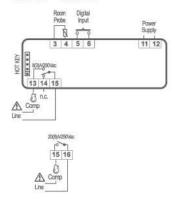
| XR10D | Digital thermostat with heating or cooling action |
|-------|--|
| XR20D | Digital controller for NT with "off cycle" defrost |
| XR30D | Digital controller for NT with "off cycle" defrost and additional configurable relay |
| XR60D | Digital controller for NT and LT ventilated applications with door switch capability |
| XR70D | Digital controller for NT and LT ventilated applications with door switch capability and auxiliary relay |
| XRROD | Digital controller for milk cooling with agitation cycle capability |



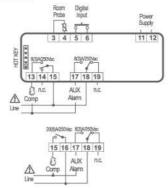
D: 4 DIN Rail

| ± 3 d.p. 24, 110, 230Vac | ± 3 d.p. 24, 110, 230Vac | ± 3 d.p. | ± 3 d.p. | 1 2 dp | V serverse |
|-----------------------------|-----------------------------|--|---|--|------------------------------------|
| | | 24, 110, 230Vac | 24, 110, 230Vac | ± 3 d.p. 24, 110, 230Vac | ± 3 d.p. 24, 110, 230Vac |
| | | | | | |
| NTC, PTC | NTC, PTC | NTC, PTC | NTC, PTC NTC, PTC | NTC, PTC NTC, PTC | NTC, PTC |
| | | | | | |
| config | config | config | config | config | |
| | | | | | |
| no 8A/nc 5A, 20A | no 8A/nc 5A, 20A | no 8A/nc 5A, 20A no 8A/nc 5A | no 8A/nc 5A, 20A no 8A/nc 5A 8A | no 8A/nc 5A, 20A no 8A/nc 5A 8A no 8A/nc 5A | no 8A/nc 5A, 20A no 8A/nc 5A |
| | | | | | |
| HACCP pres | HACCP pres | HACCP pres | HACCP pres | HACCP pres | min/max pres opt |
| | no 8A/nc 5A, 20A | config config no 8A/nc 5A, 20A HACCP pres Pres | config config config no 8A/nc 5A, no 8A/nc 5A, 20A no 8A/nc 5A, 20A no 8A/nc 5A, 20A | config config config config no 8A/nc 5A, 20A no 8A/nc 5A, 20A no 8A/nc 5A HACCP pres pres pres NTC, PTC no 8A/nc 5A, 20A no 8A/nc 5A, 20A no 8A/nc 5A | NTC, PTC NTC, PTC |

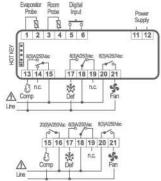
XR10D - XR20D



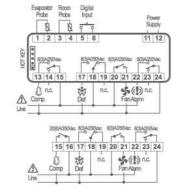




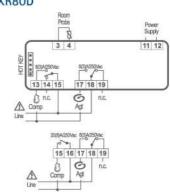
XR60D



XR70D



XR80D





UNIVERSAL-R: HEATING APPLICATIONS, NT and LT 7 PRE-CONFIGURED MAPS

- Designed to replace over 150 models of refrigeration/heating controllers in 32x74mm format
- · Easy and quick installation
- · Rapid set-up in 3 simple steps
- Dual voltage power supply 12Vac/dc and 230Vac
- · Specific functions to control twin evaporator defrost
- · Automatic probe detection
- · Complete condenser management
- · Hot Key or Prog Tool Kit connector for quick and easy programming
- 3VA max power absorption
- Display with red LED (10,5 mm high) and icons
- 7 pre-configured applications selectable from parameter [[[
 - L[] = on/off thermostat cooling
 - L[2] = thermostat with off cycle defrost
 - E[] = thermostat with electric/hot gas defrost, time initiated and time terminated
 - F[4] = thermostat with electric/hot gas defrost, time initiated and temperature terminated
 - [[6]] = thermostat with electric/hot gas defrost, time initiated and temperature terminated and evaporator fan
 - **E**[6] = twin evaporator defrost applications
 - [-[7] = on/off thermostat heating

HOW to ORDER

| UNIVERSAL-R | U | N | Ļ | ٧ | - | R | 4 | = | 6 | В | 1 | D | 0 |
|-------------|-------|------|-----|------|----|---|---|---|---|---|---|---|---|
| В | | | C | | | | | | | | | | |
| Inputs | Mea | sure | mer | t un | it | | | | | | | | |
| P = PTC | C = | °C | | | | | | | | | | | |
| N = NTC | F = ' | °F | | | | | | | | | | | |

UNIVERSAL CONTROLLER for SERVICE REPLACEMENT

UNIVERSAL-R

UNIV-R4

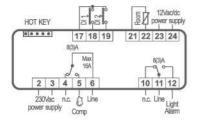
Controller for service replacement of refrigeration and heating controllers with 7 pre-configured maps



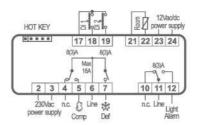
CX: 32x74mm

| FEATURES | UNIV-R4 (tC=1) | UNIV-R4 (tC=2) | UNIV-R4 (tC=3) | UNIV-R4 (tC=4) | UNIV-R4 (tC=5) | UNIV-R4 (tC=6) | UNIV-R4 (tC=7) |
|--|--------------------|--------------------|--------------------|----------------------|----------------------|----------------------------------|--------------------|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Power supply | 12Vac/dc 230Vac | 12Vac/dc 230Vac | 12Vac/dc 230Vac | 12Vac/dc 230Vac | 12Vac/dc 230Vac | 12Vac/dc 230Vac | 12Vac/dc 230Vac |
| Probe inputs | | | | | | | |
| Thermostat Defrost Defrost 2 | NTC, PTC | NTC, PTC | NTC, PTC | NTC, PTC NTC, PTC | NTC, PTC NTC, PTC | NTC, PTC NTC, PTC NTC, PTC | NTC, PTC |
| Digital inputs | | | | | | | |
| Alarm, defrost, AUX, door switch, pressure switch, ON/OFF, energy saving | 2 x config | 2 x config | 2 x config | 2 x config | 2 x config | 1 x config | 2 x config |
| Relay outputs | | | | | | | |
| Compressor | 8A | 8A | 8A | 8A | 8A | 8A | |
| Defrost | | 11. | 8A | 8A | 8A | 8A | |
| Defrost 2 | | | | | | 8A | |
| Fans | | | | | 8A | 8A | |
| Light or alarm Heating | 8A | 8A | 8A | 8A | 8A | | 8A 8A |
| Other | | | | | | | |
| Hot Key/Prog Tool Kit output | pres | pres | pres | pres | pres | pres | pres |
| Buzzer | pres | pres | pres | pres | pres | pres | pres |

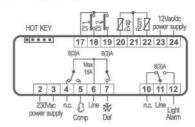
UNIV-R4 (tC 1-2)



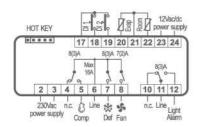
UNIV-R4 (tC 3)



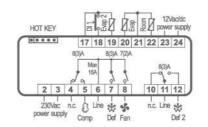
UNIV-R4 (tC 4)



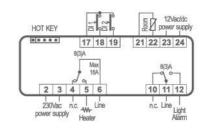
UNIV-R4 (tC 5)



UNIV-R4 (tC 6)



UNIV-R4 (tC 7)



WING: INNOVATIVE AESTHETICAL SOLUTIONS

The WING family, characterized by a high aesthetical value, presents a series of solutions able to satisfy every need in refrigeration field especially when the design becomes a fundamental, such as for cream freezers or pastry refrigerators etc... This series is available in classic formats, Compact (L and V) and Split (K), with vertical or horizontal keyboard. In particular, horizontal format is divided in 2 macro families:

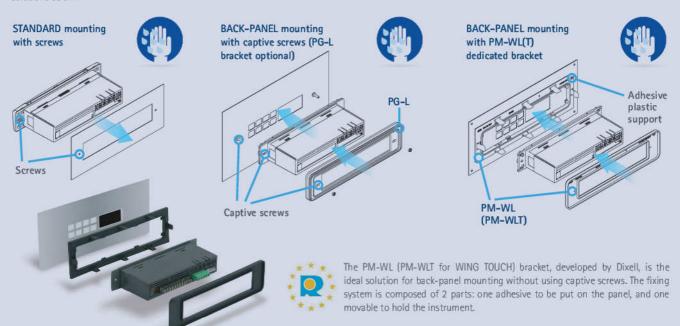
- WING TOUCH;
- WING STANDARD (available also INOX or BACK-PANEL with POLYCARBONATE).

Great versatility and customization are given to these models thanks to the reduced space (LR) and to the display with icons that, depending on the model, can be white, red or blue.



MOUNTING OPTIONS

Depending on the model, Dixell gives different mounting solutions. High protection, great aesthetic value, easy and quick fixing mode are guaranteed by the solutions below:



WING STANDARD



- · Frontal glass frame to protect the keys
- Standard front mounting



IP65

WING INOX option





- Bright or satinized steel front
- · Standard or back-panel front mounting



Back-panel mounting with captive screws (+ PG-L protection) or using the PM-WL bracket (surface thickness 0.8÷1.0mm)

BACK-PANEL with POLYCARBONATE option

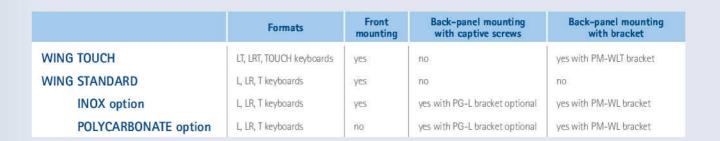
- Front polycarbonate that can be easily customized
- Back-panel mounting







Back-panel mounting with captive screws (+ PG-L protection) or using the PM-WL bracket (surface thickness 0.8÷1.0mm)





WING SERIES: NT and LT APPLICATIONS - COMPACT/SPLIT FORMAT

- Innovative controllers with different aesthetic solutions that enhance the final product
- · Direct live and neutral load connections for reduction of wiring costs
- Direct driving of compressors up to 1,2HP (20A relay inside)
- · Direct line power supply. No external transformer required
- Up to 8 push buttons with direct action for user friendly interface
- · Maximum and minimum temperature recording
- · High and low humidity control simple or floating
- Smart defrost
- · Integrated functions for energy saving
- · Continuous cycle with a dedicated set point
- · Virtual probe management
- · Hot Key or Prog Tool Kit connector for quick and easy programming
- · Connection for X-REP remote display
- · Serial connection to monitoring systems
- 7VA max power absorption
- · LED display (10,5mm high) and icons

LR and VS formats are the specific solution for all applications with a reduced space



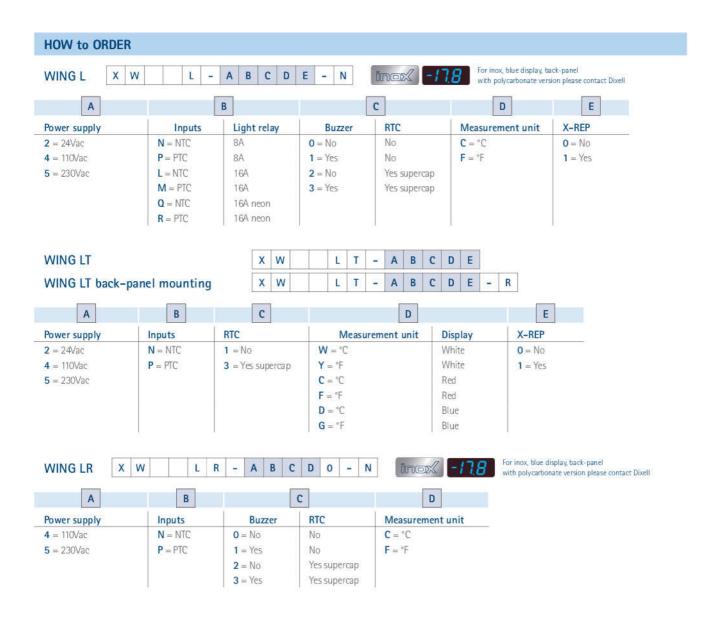




Controllers are provided with a wide display with integrated icons of the real time situation and the measurement unit, for clear and continuous monitoring.







HOW to ORDER WING LRT X W L R T A В CD 0 X W T В CD WING LRT back-panel mounting R 0 R Α В c D Power supply Inputs RTC Measurement unit Display 4 = 110 VacN = NTC1 = No W = °C White $Y = {}^{\circ}F$ 5 = 230Vac P = PTCWhite 3 = Yes supercap C = °C Red F = °F Red D = °C Blue G = °F Blue WING V CDE X W Α В For blue display please contact Dixell WING VS D O x W S C For blue display please contact Dixell Е Α В C D Power supply Inputs Buzzer Measurement unit Compressor output 2 = 24 VacN = NTC**0** = No C = °C **0** = 8A 4 = 110Vac P = PTC1 = Yes F = °F 1 = 20A 5 = 230Vac WING K A B C D E W K A В C D E Inputs/light relay RTC Power supply Measurement unit Housing 2 = 24Vac N = NTC0 = Open board "OS" C = °C 0 = No 4 = 110Vac P = PTC 1 = Open board + 8 DIN Rail base F = °F 2 = Yes supercap 5 = 230Vac L = NTC/16A neon 2 = 8 DIN Rail 4 = Battery M = PTC/16A neon 3 = "GS" housing For inox and back-panel with polycarbonate version on TX keyboards please contact Dixell CX/TX/VX KEYBOARDS X 2 0 - A 0 0 N 0 For blue display please contact Dixell Α Buzzer

TOUCH KEYBOARDS

TOUCH KEYBOARDS back-panel mounting

| T | 2 | 0 | T | • | 1 | 0 | 0 | D | 0 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| T | 2 | 0 | T | - | 1 | 0 | 0 | D | 0 | - | R |

Display

N = Red

0 = No **1** = Yes

IN - Incu

R = Blue

W = White

CONTROLLERS for STATIC APPLICATIONS

| XW20L | Digital controller for NT with "off cycle" defrost | |
|---------|---|--|
| XW20LT | Digital controller for NT with "off cycle" defrost, TOUCH interface and red, white or blue display | ************************************** |
| XW20LR | Digital controller for NT with "off cycle" defrost and reduced depth | L, LR: 38x1 |
| XW20LRT | Digital controller for NT with "off cycle" defrost, reduced depth, TOUCH interface and red, white or blue display | |



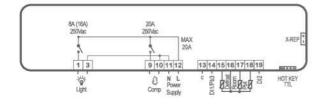


(185mm

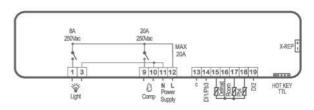
LT, LRT: 38x185mm

| FEATURES | XW20L | XW20LT | XW20LR | XW20LRT |
|---|--|--|----------------------------------|----------------------------------|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Keyboard: push buttons | 6 | 6 | 6 | 6 |
| Power supply | 24, 110, 230Vac | 24, 110, 230Vac | 110, 230Vac | 110, 230Vac |
| Probe inputs | | | | |
| Thermostat Defrost Condenser Display | NTC, PTC NTC, PTC NTC, PTC NTC, PTC | NTC, PTC NTC, PTC NTC, PTC NTC, PTC | NTC, PTC NTC, PTC NTC, PTC | NTC, PTC NTC, PTC NTC, PTC |
| Digital inputs | | | | |
| Alarm, start defrost, door switch, pressure switch, probe | config | config | config | config |
| DI 2 | config | config | config | config |
| Relay outputs | | | | |
| Compressor Defrost Fans | 20A | 20A | 20A | 20A |
| Light Alarm, AUX RL 6 configurable | 8A, 16A | 8A | 8A | 8A |
| Other | | | | |
| Hot Key/Prog Tool Kit output Remote display output | pres X-REP opt | pres X-REP opt | pres | pres |
| Serial output Triac output | TTL | TTL | TTL | TTL |
| Buzzer | opt | pres | opt | pres |
| Real time clock | opt | opt | opt | opt |

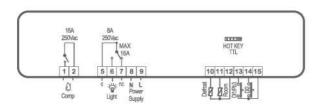
XW20L



XW20LT



XW20LR - XW20LRT



CONTROLLERS for STATIC APPLICATIONS









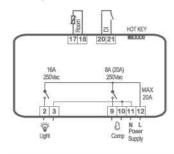
V, VS: 100x64mm K:

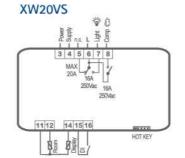
K: OS/GS/8 DIN Rail

| XW20V | Digital controller for NT with "off cycle" defrost |
|--------|--|
| XW20VS | Digital controller for NT with "off cycle" defrost and reduced depth |
| XW20K | Digital controller in split format for NT with "off cycle" defrost |
| XW40L | Digital controller for NT and LT with electrical or hot gas defrost function |
| XW40K | Digital controller in split format for NT and LT with electrical or hot gas defrost function |

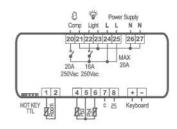
| FEATURES | XW20V | XW20VS | XW20K | XW40L | XW40K |
|--|-----------------|-----------------|--------------------------------------|--|--|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | on keyboard ± 3 d.p. | ± 3 d.p. | on keyboard ± 3 d.p |
| Keyboard: push buttons | 6 | 6 | 6 (on CX620, TX620, T620T, VX620) | | 6 (on CX620, TX620, T620T, VX620) |
| Power supply | 24, 110, 230Vac | 24, 110, 230Vac | 24, 110, 230Vac | 24, 110, 230Vac | 24, 110, 230Vac |
| Probe inputs | | | | | |
| Thermostat Defrost Condenser Display | NTC, PTC | NTC, PTC | NTC, PTC NTC, PTC NTC, PTC | NTC, PTC NTC, PTC NTC, PTC NTC, PTC | NTC, PTC NTC, PTC NTC, PTC NTC, PTC |
| Digital inputs | | | | | |
| Alarm, start defrost, door switch, pressure switch, probe DI 2 | config | config | config | config | config |
| Relay outputs | | | | | |
| Compressor Defrost Fans | 8A, 20A | 16A | 20A | 20A 8A | 20A 16A |
| Light Alarm, AUX RL 6 configurable | 16A | 16A | 16A | 8A, 16A | 16A |
| Other | | | | | |
| Hot Key/Prog Tool Kit output Remote display output | pres | pres | pres | pres X-REP opt TTL | pres TTL |
| Serial output Triac output | | | IIL. | IIL | IIL |
| Buzzer Real time clock | opt | opt | on keyboard opt | opt opt | on keyboard |

XW20V

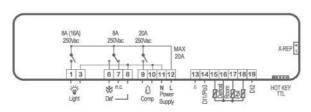




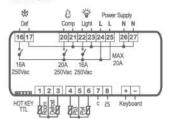
XW20K



XW40L



XW40K



CONTROLLERS for VENTILATED APPLICATIONS

| XW60L | Digital controller for NT and LT with electrical or hot gas defrost function and fans |
|---------|--|
| XW60LT | Digital controller for NT and LT with electrical or hot gas defrost function and fans, TOUCH interface and red, white or blue display |
| XW60LR | Digital controller for NT and LT with electrical or hot gas defrost function and fans and reduced depth |
| XW60LRT | Digital controller for NT and LT with electrical or hot gas defrost function and fans, reduced depth, TOUCH interface and red, white or blue display |
| XW60V | Digital controller for NT and LT with electrical or hot gas defrost function and fans |
| XW60VS | Digital controller for NT and LT with electrical or hot gas defrost function and fans and reduced depth |



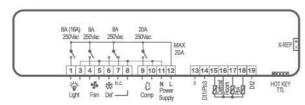




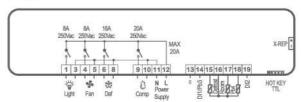
LT, LRT: 38x185mm V, VS: 100x64mm

| FEATURES | XW60L | XW60LT | XW60LR | XW60LRT | XW60V | XW60VS |
|--|--|--|----------------------------------|----------------------------------|----------------------------|----------------------------------|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Keyboard: push buttons | 6 | 6 | 6 | 6 | 6 | 5 |
| Power supply | 24, 110, 230Vac | 24, 110, 230Vac | 110, 230Vac | 110, 230Vac | 24, 110, 230Vac | 24, 110, 230Va |
| Probe inputs | | | | | | |
| Thermostat Defrost Condenser Display | NTC, PTC NTC, PTC NTC, PTC NTC, PTC | NTC, PTC NTC, PTC NTC, PTC NTC, PTC | NTC, PTC NTC, PTC NTC, PTC | NTC, PTC NTC, PTC NTC, PTC | NTC, PTC NTC, PTC | NTC, PTC NTC, PTC NTC, PTC |
| Digital inputs | | | | | | |
| Alarm, start defrost, door switch, pressure switch, probe DI 2 | config | config | config | config | config | config |
| Relay outputs | Coming | coming | comig | some | | |
| Compressor Defrost Fans Light Alarm, AUX RL 6 configurable | 20A 8A 8A 8A, 16A | 20A 16A 8A 8A | 20A 8A 5A 5A | 20A 8A 5A 5A | 8A, 20A 8A 8A 16A | 16A 16A 8A |
| Other | | | | | | |
| Hot Key/Prog Tool Kit output Remote display output Serial output Triac output | pres X-REP opt TTL | pres X-REP opt TTL | pres | pres | pres | pres |
| Buzzer Real time clock | opt opt | pres opt | opt opt | pres | opt | opt |

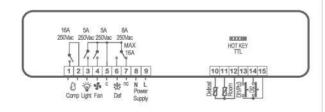
XW60L



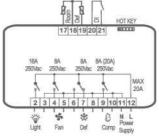
XW60LT

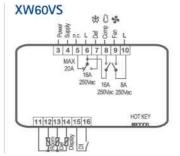


XW60LR - XW60LRT



XW60V





CONTROLLERS for VENTILATED APPLICATIONS



L: 38x185mm





LT: 38x185mm

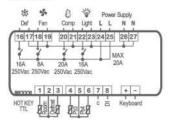
K: OS/GS/8 DIN Rail

| XW60K | Digital controller in split format for NT and LT with electrical or hot gas defrost function and fans |
|--------|--|
| XW70L | Digital controller in split format for NT and LT with electrical or hot gas defrost function, fans and auxiliary relay |
| XW70LT | Digital controller for NT and LT with electrical or hot gas defrost function, fans and auxiliary relay, TOUCH interface and red, white or blue display |
| VMZOV | Digital controller in split format for NT and LT with electrical or hot gas defrost function, fans, |

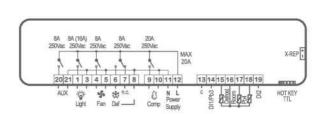
XW70K auxiliary relay and triac (ON/OFF) **FEATURES** XW60K XW70L XW70LT XW70K

| Display: n° digits | on keyboard ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | on keyboard ± 3 d.p. |
|--|--|--|--|--|
| Keyboard: push buttons | 6 (on CX620, TX620, T620T, VX620) | 8 | 8 | 8 (on TX820, T820T, VX820) |
| Power supply | 24, 110, 230Vac | 24, 110, 230Vac | 24, 110, 230Vac | 24, 110, 230Vac |
| Probe inputs | | | | |
| Thermostat Defrost Condenser Display | NTC, PTC NTC, PTC NTC, PTC NTC, PTC |
| Digital inputs | | | | |
| Alarm, start defrost, door switch, pressure switch, probe DI 2 | config | config config | config | config |
| Relay outputs | | Participant of Section 1 | 40000 000 6 00 | |
| Compressor Defrost Fans Light Alarm, AUX RL 6 configurable | 20A 16A 8A 16A | 20A 8A 8A 8A, 16A 8A | 20A 16A 8A 8A 8A | 20A 16A 8A 16A |
| Other | | | | |
| Hot Key/Prog Tool Kit output Remote display output Serial output Triac output | pres TTL | pres X-REP opt TTL | pres X-REP opt TTL | pres TTL 2A |
| Buzzer Real time clock | on keyboard opt | opt opt | pres opt | on keyboard opt |

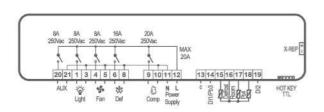
XW60K



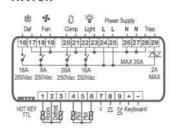
XW70L



XW70LT



XW70K



CONTROLLERS for VENTILATED APPLICATIONS

XW90L Digital controller for NT and LT with electrical or hot gas defrost function, fans, auxiliary relay and sixth relay configurable





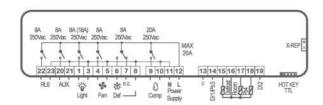
Digital controller for NT and LT with electrical or hot gas defrost function, fans, auxiliary relay and sixth relay configurable, TOUCH interface and red, white or blue display

L: 38x185mm LT: 38x185mm

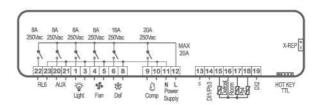
| FEATURES | XW90L | XW90LT |
|--|-------------------------------------|-------------------------------------|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. |
| Keyboard: push buttons | 8 | 8 |
| Power supply | 24, 110, 230Vac | 24, 110, 230Vac |
| Probe inputs | | |
| Thermostat Defrost Condenser Display | NTC, PTC NTC, PTC NTC, PTC NTC, PTC | NTC, PTC NTC, PTC NTC, PTC NTC, PTC |
| Digital inputs | | |
| Alarm, start defrost, door switch, pressure switch, probe | config | config |
| DI 2 | config | config |
| Relay outputs | | |
| Compressor Defrost Fans Light Alarm, AUX RL 6 configurable | 20A 8A 8A 8A, 16A 8A | 20A 16A 8A 8A 8A |
| Other | | |
| Hot Key/Prog Tool Kit output Remote display output Serial output Triac output | pres X-REP opt TTL | pres X-REP opt TTL |
| Buzzer Real time clock | opt opt | pres opt |

XW90L

XW90LT



XW90LT



KEYBOARDS for CONTROLLERS in K FORMAT





32x74mm









100x64mm

| CX620 | 6 key keyboard (32x74mm) for controllers in K format |
|-------|---|
| TX620 | 6 key keyboard (horizontal WING) for controllers in K format |
| T620T | 6 key keyboard for controllers in K format with TOUCH interface and red, white and blue display |
| VX620 | 6 key keyboard (vertical WING) for controllers in K format |
| TX820 | 8 key keyboard (horizontal WING) for controllers in K format |
| T820T | 8 key keyboard for controllers in K format with TOUCH interface and red, white and blue display |
| VX820 | 8 key keyboard (vertical WING) for controllers in K format |

| FEATURES | CX620 | TX620 | T620T | VX620 | TX820 | T820T | VX820 |
|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------------|-----------------|-----------------|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Keyboard: push buttons | 6 | 6 | 6 | 6 | 8 | 8 | 8 |
| Power supply | from controller | from controller | from controller | from controller | from controller | from controller | from controller |
| Slave module | XW20K XW40K XW60K | XW20K XW40K XW60K | XW20K XW40K XW60K | XW20K XW40K XW60K | XW70K | XW70K | XW70K |
| Buzzer | opt | opt | pres | opt | opt | pres | opt |

The keyboards CX, TX and VX are provided with a wide display with integrated icons of real time situation and measurement unit, for clear and continuous monitoring.



Т

The POWER MODULES in K FORMAT are AVAILABLE in 4 DIFFERENT VERSIONS

OS: open board



GS: with plastic housing 225x180x84mm



8 DIN Rail base: open board with 8 DIN bottom



8 DIN Rail: with 8 DIN plastic housing





SECTION INDEX

FUNCTIONS MODELS

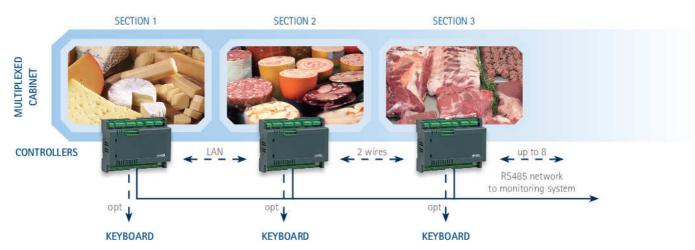
| XM200/400/600 - NT and LT multiplexed applications | | | | |
|---|--|----|--|--|
| Controllers for static or ventilated applications | XM244L - XM440K - XM460K XM470K | 38 | | |
| Controllers for ventilated applications with EEV management | XM660K - XM668D - XM669K XM670K - XM678D - XM679K | 40 | | |
| Keyboards for controllers in K format | CX640 - T640 - V640 CX660 - T660T - T840 - V840 | 42 | | |
| Accessories | XM-RTC - XM-FC16 XM-FC21 - XM-FC26 | 42 | | |

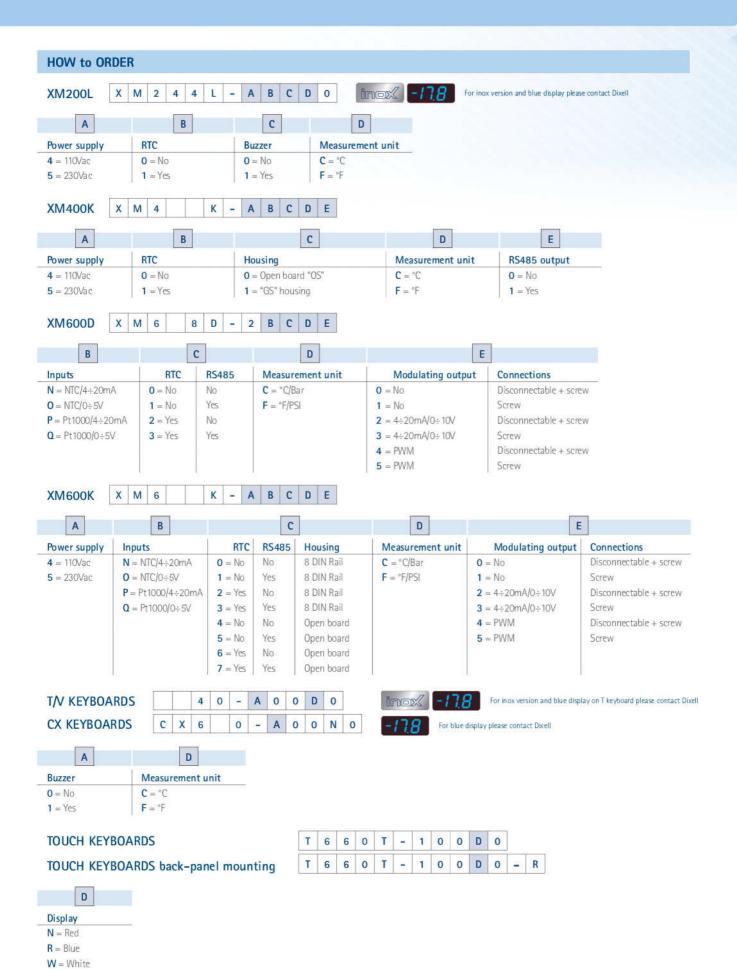


XM200/400/600 SERIES: NT and LT APPLICATIONS

- Multifunction controllers for multiplexed applications
- Multi-master devices (XM400/600)
- Up to 5 controllers linked for XM400 series and up to 8 for XM600 series
- Internal Real Time Clock
- Superheat adaptive control (XM600)
- Integrated ON/OFF or stepper electronic expansion valve drive (XM600)
- Anti-sweat heater management through a "DEW POINT" (XM600)
- · Virtual probe management (XM600)
- Evaporating fans speed management via PWM or 4÷20mA/0÷10V (XM600)
- XM668D and XM678D models certified by Alco to be used combined with EX4, EX5, EX6 valves
- Keyboard with direct access to the main functions (also with TOUCH interface)
- Hot Key or Prog Tool Kit connector for quick and easy programming
- · Serial connection to monitoring systems
- 10VA max power absorption
- Display with red LED (13,2 mm high), (10,5mm and icons for CX format and WING TOUCH)

MULTIPLEXED CABINET APPLICATIONS with CONTROLLERS in K FORMAT





XM200

CONTROLLER for MULTIPLEXED VENTILATED APPLICATIONS



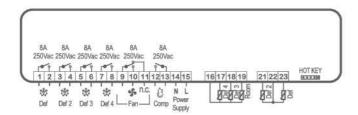
XM244L

Digital controller in compact format for NT and LT ventilated applications with 4 defrost management

L: 38x185mm

| FEATURES | XM244L | |
|------------------------------|-------------|--|
| Display: n° digits | ± 3 d.p. | |
| Keyboard: push buttons | 5 | |
| Power supply | 110, 230Vac | |
| Probe inputs | | |
| Thermostat | NTC | |
| Defrost | NTC | |
| Defrost 2 | NTC | |
| Defrost 3 | NTC | |
| Defrost 4 | NTC | |
| Relay outputs | | |
| Compressor | 8A | |
| Defrost | 8A | |
| Defrost 2 | 8A | |
| Defrost 3 | 8A | |
| Defrost 4 | 8A | |
| Fans | 8A | |
| Other | | |
| Hot Key/Prog Tool Kit output | pres | |
| Serial output | TTL | |
| Buzzer | opt | |
| Real time clock | opt | |

XM244L



CONTROLLERS for STATIC or VENTILATED MULTIPLEXED APPLICATIONS

XM400

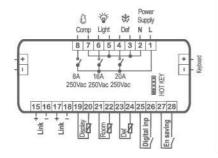
| XM440K | Digital controller for NT and LT static applications |
|--------|--|
| XM460K | Digital controller for NT and LT ventilated applications |
| XM470K | Digital controller for NT and LT ventilated applications with auxiliary output |



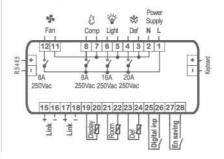
K: OS/GS

| FEATURES | XM440K | XM460K | XM470K |
|--|--------------------------|--------------------------|----------------------|
| Display: n° digits | on keyboard ± 3 d.p. | on keyboard ± 3 d.p. | on keyboard ± 3 d.p. |
| Keyboard: push buttons | 6 (on CX640, T640, V640) | 6 (on CX640, T640, V640) | 8 (on T840, V840) |
| Power supply | 110, 230Vac | 110, 230Vac | 110, 230Vac |
| Probe inputs | | | |
| Thermostat | NTC | NTC | NTC |
| Defrost | NTC | NTC | NTC |
| Display | NTC | NTC | NTC |
| AUX | | | |
| Suction pressure | | | |
| Condensing pressure | | | |
| Digital inputs | | | |
| Start defrost, pressure switch, AUX, generic alarm, serious alarm mode, light, ON/OFF, holiday | config | config | config |
| Energy saving | pres | pres | pres |
| Relay outputs | | | |
| Compressor | 8A | 8A | 8A |
| Defrost | 20A | 20A | 20A |
| Fans | | 8A | 8A |
| Light | 16A | 16A | 16A |
| Alarm | | | |
| AUX | | | 8A |
| Other | | | |
| Hot Key/Prog Tool Kit output | pres | pres | pres |
| Remote display output | X-REP | X-REP | X-REP |
| Serial output | TTL, RS485 opt | TTL, RS485 opt | TTL, RS485 opt |
| 4÷20mA/0÷10V output | | | |
| PWM output | | | |
| Valve driver output | | | |
| Buzzer | on keyboard | on keyboard | on keyboard |
| Real time clock | opt | opt | opt |
| Connection kit | | 111 | A-10. |

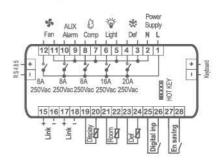
XM440K



XM460K



XM470K



XM600

CONTROLLERS for VENTILATED MULTIPLEXED APPLICATIONS with EEV MANAGEMENT

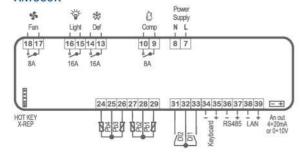


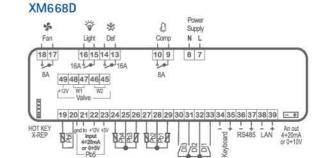
K: OS/8 DIN Rail D: 8 DIN Rail

| XM660K | Digital controller for NT and LT ventilated applications with high performance defrost |
|--------|--|
| XM668D | Digital controller for NT and LT ventilated applications with high performance defrost and stepper electronic valve management |
| XM669K | Digital controller for NT and LT ventilated applications with high performance defrost and ON/OFF electronic valve management |

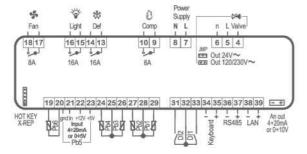
| FEATURES | XM660K | XM668D | XM669K |
|--|---|--|--|
| Display: n° digits Keyboard: push buttons Power supply | on keyboard ± 3 d.p. 6 (on CX660, T660T) 110, 230Vac | on keyboard ± 3 d.p. 6 (on CX660, T660T) 24Vac | on keyboard ± 3 d.p. 6 (on CX660, T660T) 110, 230Vac |
| Probe inputs | | | |
| Thermostat Defrost Display AUX Suction pressure Condensing pressure | NTC, Pt1000 NTC, Pt1000 NTC, Pt1000 NTC, Pt1000 | NTC, Pt1000 NTC, Pt1000 NTC, Pt1000 NTC, Pt1000 NTC, Pt1000, 4÷20mA, 0÷5V NTC, Pt1000 | NTC, Pt1000 NTC, Pt1000 NTC, Pt1000 NTC, Pt1000 NTC, Pt1000, 4÷20mA, 0÷5V NTC, Pt1000 |
| Digital inputs | | | |
| Start defrost, pressure switch, AUX, generic alarm, serious alarm mode, light, ON/OFF, holiday Energy saving | 2 x config | 3 x config | 2 x config |
| Relay outputs | | | |
| Compressor/Valve Defrost Fans Light Alarm AUX | 8A 16A 8A 16A | 8A 16A 8A 16A | 8A 16A 8A 16A |
| Other | | | |
| Hot Key/Prog Tool Kit output Remote display output Serial output 4÷20mA/0÷10V output PWM output Valve driver output Buzzer Real time clock | pres X-REP RS485 opt opt opt on keyboard pres | pres X-REP RS485 opt opt opt stepper on keyboard pres | pres X-REP RS485 opt opt opt ON/OFF up to 30W on keyboard pres |
| Connection kit | XM-FC16 | XM-FC26 | XM-FC21 |

XM660K





XM669K



CONTROLLERS for VENTILATED MULTIPLEXED APPLICATIONS with EEV MANAGEMENT

XM600

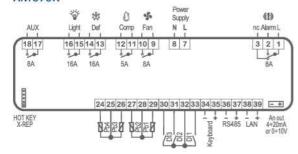
| XM670K | Digital controller for NT and LT ventilated applications with high performance defrost and auxiliary and alarm outputs |
|--------|---|
| XM678D | Digital controller for NT and LT ventilated applications with high performance defrost, stepper electronic valve management and auxiliary and alarm outputs |
| XM679K | Digital controller for NT and LT ventilated applications with high performance defrost, ON/OFF |



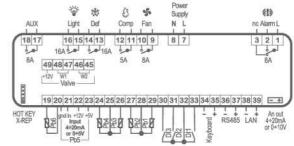
K: OS/8 DIN Rail D: 8 DIN Rail

| FEATURES | XM670K | XM678D | XM679K |
|--|---|--|--|
| Display: n° digits Keyboard: push buttons Power supply | on keyboard ± 3 d.p. 6 (on CX660, T660T) 110, 230Vac | on keyboard ± 3 d.p. 6 (on CX660, T660T) 24Vac | on keyboard ± 3 d.p. 6 (on CX660, T660T) 110, 230Vac |
| Probe inputs | | | |
| Thermostat Defrost Display AUX Suction pressure Condensing pressure | NTC, Pt1000 NTC, Pt1000 NTC, Pt1000 NTC, Pt1000 | NTC, Pt1000 NTC, Pt1000 NTC, Pt1000 NTC, Pt1000 NTC, Pt1000, 4÷20mA, 0÷5V NTC, Pt1000 | NTC, Pt1000 NTC, Pt1000 NTC, Pt1000 NTC, Pt1000 NTC, Pt1000, 4÷20mA, 0÷5V NTC, Pt1000 |
| Digital inputs | | | |
| Start defrost, pressure switch, AUX, generic alarm, serious alarm mode, light, ON/OFF, holiday Energy saving | 3 x config | 3 x config | 3 x config |
| Relay outputs | | | |
| Compressor/Valve Defrost Fans Light Alarm AUX | 5A 16A 8A 16A 8A 8A | 5A 16A 8A 16A 8A | 5A 16A 8A 16A 8A |
| Other | | | |
| Hot Key/Prog Tool Kit output Remote display output Serial output 4÷20mA/0÷10V output PWM output Valve driver output Buzzer Real time clock | pres X-REP RS485 opt opt opt on keyboard pres | pres X-REP RS485 opt opt opt stepper on keyboard pres | pres X-REP RS485 opt opt opt ON/OFF up to 30W on keyboard pres |

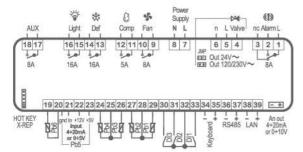
XM670K



XM678D



XM679K



XM400/600

KEYBOARDS for CONTROLLERS in K FORMAT









| CX640 | 6 key keyboard (32x74mm) for XM400 controllers |
|-------|--|
| T640 | 6 key keyboard (horizontal WING) for XM400 controllers |
| V640 | 6 key keyboard (vertical WING) for XM400 controllers |
| CX660 | 6 key keyboard (32x74mm) for XM600 controllers |
| T660T | 6 key keyboard for XM600 controllers with TOUCH interface and red, white or blue display |
| T840 | 8 key keyboard (horizontal WING) for XM400 controllers |
| V840 | 8 key keyboard (vertical WING) for XM400 controllers |

| FEATURES | CX640 | T640 | V640 | CX660 | T660T | T840 | V840 |
|------------------------|------------------|------------------|------------------|--|--|-----------------|-----------------|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Keyboard: push buttons | 6 | 6 | 6 | 6 | 6 | 8 | 8 |
| Power supply | from controller | from controller | from controller | from controller | from controller | from controller | from controller |
| Slave module | XM440K XM460K | XM440K XM460K | XM440K XM460K | XM660K XM668D XM669K XM670K XM678D XM679K | XM660K XM668D XM669K XM670K XM678D XM679K | XM470K | XM470K |
| Buzzer | opt | opt | opt | opt | pres | opt | opt |

CX and TOUCH keyboards are provided with a wide display with integrated icons of real time situation and of measurement unit, for clear and continuous monitoring.





The POWER MODULES in K FORMAT are AVAILABLE in 3 DIFFERENT VERSIONS

OS: open board for XM400 and XM600



GS: standard plastic case for XM400



8 DIN Rail: with plastic housing for XM600



ACCESSORIES

XM-RTC

Real time clock standard board for XM400



XM-FC16

Female connector kit 16 pins for XM660K and XM670K XM-FC21

Female connector kit 21 pins for XM669K and XM679K XM-FC26

Female connector kit 26 pins for XM668D and XM678D







ELECTRONIC EXPANSION VALVE DRIVERS

SECTION INDEX

FUNCTIONS

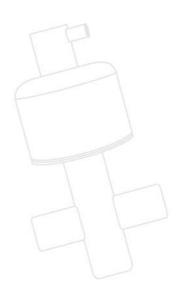
XEV - superheat regulation 43 Drivers for ON/OFF expansion valve management XEV11D - XEV12D 46 Drivers for stepper electronic expansion valve management XEV21D - XEV22D 46 Driver for electronic expansion valve management with sub-cooling management XEV32D 46 Keyboard for XEV11D and XEV21D controllers KB1 PRG 46 Accessory CAB/KB11 46

MODELS



XEV SERIES: SUPERHEAT REGULATION

- Drivers for ON/OFF (pulsed) and stepper electronic expansion valve management
- ON/OFF (pulsed) expansion valve support with 30W max power and coil c.a.
- Temperature analog inputs (NTC, PTC, Pt1000)
- Pressure analog inputs (0÷5V, 4÷20mA)
- · Possibility to broadcast via LAN the pressure signal to multiplexed cabinets
- Alarm management (visual, relay)
- · Cool Defrost for defrost time reduction
- · Superheat adaptive control
- Sub-cooling management (XEV32D)
- Hot Key or Prog Tool Kit connector for quick and easy programming
- · Serial connection to monitoring systems
- 20VA max power absorption
- Display with red LED (10,5mm high) and icons



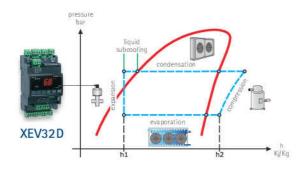
HOW to ORDER

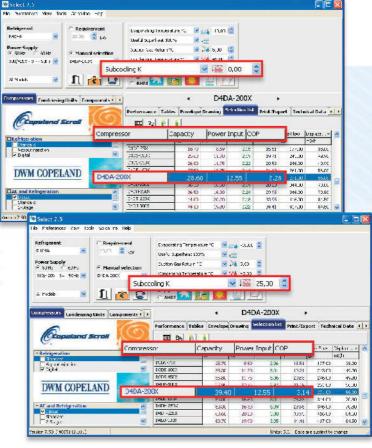
| XEV11/12D | X | E | ٧ | 1 | D | - | Α | В | С | D | E |
|--------------|---|---|---|---|---|----|---|---|---|---|---|
| XEV21/22/32D | X | E | ٧ | | D | =3 | 1 | В | c | D | 0 |

| Α | В | С | D | E |
|-------------------|-------------------|------------------|------------------|---------------|
| Power supply | Temperature probe | Pressure probe | Measurement unit | Buzzer |
| 2 = 24Vac | P = Pt1000 | 0 = 0÷5V | C = °C/Bar | 0 = No |
| 4 = 110Vac | N = NTC | 1 = 4÷20mA | F = °F/PSI | 1 = Yes |
| 5 = 230Vac | | 2 = PP11 | | |
| | | 3 = PP30 | | |
| | | 4 = PPR 15 | | |
| | | 5 = PPR30 | | |

SUB-COOLING

During the refrigeration cycle shown in the following diagram, the temperature of the liquid refrigerant entering by the thermostatic valve is important. Decreasing this value results in many economic advantages because it increases the "refrigerating effect" (h2-h1). For this reason it's important to introduce the concept of sub-cooling of the refrigerating fluid as "saturated liquid". This process, if properly managed, can improve LT plant operation (also more than 25%), against a meagre power of the NT compressor rack (about 8%) and an appropriate exchanger. The XEV32D driver, thanks to special algorithms, ensures the sub-cooling optimization, which increases the plant COP (Coefficient Of Performance). Screens show as, with the same compressor, the sub-cooling management increase the refrigeration power (COP increasing). For this reason it's possible to consider the use of a smaller compressor (less absorbed power).





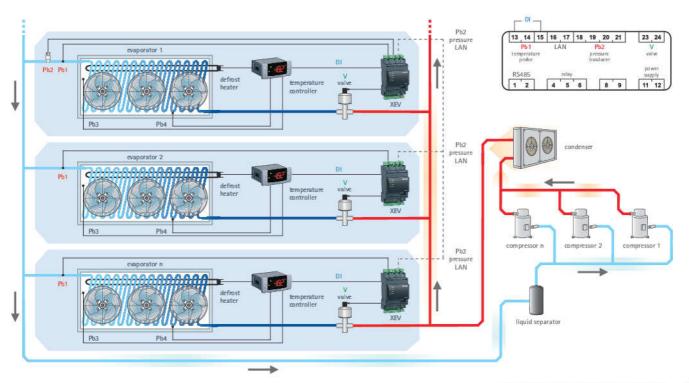
Pressure-enthalpy diagram shows the refrigeration cycle and the sub-cooling zone.

REFRIGERATION CIRCUIT

The diagram shows the different ways to connect the XEV drivers to a generic application like a single cooling unit or multiplexed cabinet. The valve is driven by the XEV module that is in turn commanded, by the activation of the digital input, from the temperature controller.

SINGLE SYSTEM: section 1 of the schematic diagram shows how connections would be arranged for a single cooling system.

MULTIPLEXED CABINET: to reduce installation costs, it is possible to use a single suction pressure transducer as shown in the overall schematic diagram. This transducer's pressure signal is repeated to the other controllers across a digital LAN connection that guarantees optimal noise immunity.



XEV

KEYBOARD and DRIVERS for ON/OFF and STEPPER ELECTRONIC EXPANSION VALVE MANAGEMENT





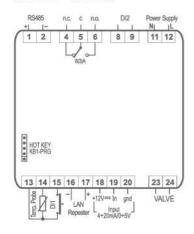
D: 4 DIN Rail

100x64mm

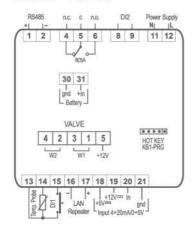
| XEV11D | ON/OFF electronic expansion valve driver |
|---------|--|
| XEV12D | ON/OFF electronic expansion valve driver with integrated display |
| XEV21D | Stepper electronic expansion valve driver |
| XEV22D | Stepper electronic expansion valve driver with integrated display |
| XEV32D | Stepper electronic expansion valve driver with integrated display and sub-cooling management |
| KB1 PRG | Programming keyboard for XEV11D and XEV21D modules |

| FEATURES | XEV11D | XEV12D | XEV21D | XEV22D | XEV32D | KB1 PRG |
|--|-----------------------------|----------------------------------|-----------------------------|-----------------------------|--|----------------------------------|
| Display: n° digits Keyboard: push buttons Power supply | 24, 110, 230Vac | ± 3 d.p. 3 24, 110, 230Vac | 24Vac/dc | ± 3 d.p. 3 24Vac/dc | ± 3 d.p. 3 24Vac/dc | ± 3 d.p. 6 from controller |
| Probe inputs | 4.20-4.0-5/ | 4-20-4-0-51/ | 4-20-4-0-5/ | 1.20-1.0.07 | 1.00-1.0.57 | |
| Suction pressure Suction temperature Output liquid temperature | 4÷20mA, 0÷5V NTC, Pt1000 | 4÷ 20mA, 0÷5V NTC, Pt1000 | 4÷20mA, 0÷5V NTC, Pt1000 | 4÷20mA, 0÷5V NTC, Pt1000 | 4÷20mA, 0÷5V NTC, Pt1000 NTC, Pt1000 | |
| Digital inputs | | | | | | |
| Free of voltage | pres | pres | pres | pres | pres | |
| High voltage | pres | pres | pres | pres | pres | |
| Relay outputs | | | | | | |
| Alarm | 8A config | 8A config | 8A config | 8A config | 8A config | |
| Other | | | | | | |
| Valve driver output | ON/OFF up to 30W | ON/OFF up to 30W | stepper | stepper | stepper | |
| Hot Key/Prog Tool Kit output | pres | pres | pres | pres | pres | |
| Remote keyboard output | KB1 PRG | 95 | KB1 PRG | | 5066 | |
| Serial output | RS485 | RS485 | RS485 | RS485 | RS485 | |
| Alarm recovery by LAN | pres | pres | pres | pres | pres | |
| Buzzer | opt | opt | A sec | 10 | No. | |
| Battery backup input | | | pres | pres | pres | |

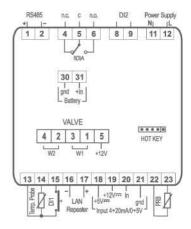
XEV11D - XEV12D



XEV21D - XEV22D



XEV32D





CAB/KB11

Cable for the connection between the keyboard and the XEV driver, 1m





ROOM CONTROLLERS

SECTION INDEX

FUNCTIONS MODELS XLR100 COOL MATE - NT and LT applications 48 Controller for NT refrigerated rooms XLR130 49 Controller for NT and LT refrigerated rooms XLR 170 49 XLR400 COOL MATE - NT and LT applications with dual temperature management 50 Controller with dual temperature management for NT and LT refrigerated rooms XLR460 51 Controller with dual temperature management XLR470 for LT refrigerated rooms 51 XLH200/300 COOL MATE - NT and LT applications and maturing rooms with temperature/humidity management 52 Controller for NT and LT refrigerated rooms with temperature and humidity management XLH260 53 Controller for maturing rooms with temperature XLH360 and humidity management 53 V-KIT - NT and LT applications - split format 54 Wall adapter for WING vertical keyboards V-KIT



XLR100 COOL MATE SERIES: NT and LT APPLICATIONS

- Advanced multifunction refrigeration controllers suitable for both heating and cooling applications
- Temperature control can be performed on probe 1, probe 2 or by the difference between probe 1 and 2
- · Complete compressor and defrost management
- · Maximum and minimum temperature recording
- Direct line power supply 230 (110) Vac. No external transformer required
- · Instant visibility of machine status via display icons
- · Clear alarm signals thanks to the front lid
- · Fast and easy wiring
- · Designed to be wall or panel mounted
- Hot Key or Prog Tool Kit connector for quick and easy programming
- · Serial connection to monitoring systems
- 10VA max power absorption
- · Display with red LED (30,5mm high) and 11 icons

HOW to ORDER XLR 100 X L R 1 A B C D E For blue display please contact Dixell В C D E RTC Power supply Inputs/kind of output Measurement unit RS485 output 2 = 24Vac N = NTC/standard 1 = No C = °C 2 = No P = PTC/standard F=°F 4 = 110Vac 3 = Yes 3 = Yes **5** = 230Vac 0 = NTC/direct loads Q = PTC/direct loads

CONTROLLERS for NT and LT COLD ROOMS

XLR130 "off cycle" defrost digital controller for NT

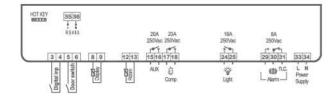
XLR170 Digital controller for NT and LT ventilated applications



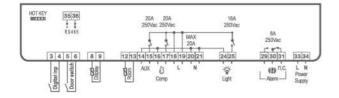
230x210mm

| FEATURES | XLR130 | XLR170 |
|---|----------------------------------|--------------------------------------|
| Display: n° digits Keyboard: push buttons Power supply | ± 3 d.p. 8 24, 110, 230Vac | ± 3 d.p. 8 24, 110, 230Vac |
| Probe inputs | | |
| Thermostat Defrost Display | NTC, PTC NTC, PTC | NTC, PTC NTC, PTC NTC, PTC |
| Digital inputs | | |
| Alarm, block alarm, pressure switch, start defrost, energy saving, ON/OFF, AUX, holiday | config | config |
| Door switch | pres | pres |
| Relay outputs | | |
| Compressor Defrost Fans Light AUX Alarm | 20A 16A 20A 8A | 20A 16A 8A 16A 20A 8A |
| Other | | |
| Hot Key/Prog Tool Kit output Serial output Buzzer | pres RS485 opt pres | pres RS485 opt pres |
| Real time clock | opt | opt |

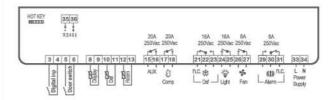
XLR130



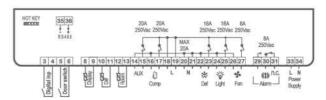
XLR130 direct loads



XLR170



XLR170 direct loads

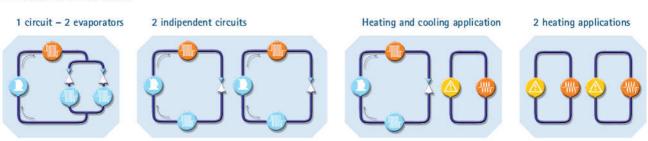




XLR400 COOL MATE SERIES: NT and LT APPLICATIONS with **DUAL TEMPERATURE MANAGEMENT**

- · Advanced multifunction refrigeration controllers with dual temperature management
- · Ideal for heating-cooling applications such as a heated bain-marie counter with refrigerated under-counter storage
- · Designed for a dual refrigeration circuit or 2 independent circuits
- · Integrated defrost management
- · Cooling or heating action selectable by user
- Direct line power supply 230 (110) Vac. No external transformer required
- Instant visibility of machine status via display icons
- · Fast and easy wiring
- · Designed to be wall or panel mounted
- · Hot Key or Prog Tool Kit connector for quick and easy programming
- · Serial connection to monitoring systems
- 10VA max power absorption
- Dual display with red LED (25,3mm high) and yellow LED (20,3mm high) and 13 icons

TYPICAL APPLICATIONS



HOW to ORDER

| XLR400 | X | L | R | 4 | 0 | | Α | 0 | С | D | Е | |
|--------------|---|---|-----|---------------|---|---|--------|------|------|------|---|---------------|
| Α | | | | (| 2 | | | | D | | | Е |
| Power supply | | | | RTC | | 1 | Meas | urer | nent | unit | t | RS485 output |
| 2 = 24Vac | | | (|) = No | | (|)° = ° | 7 | | | | 0 = No |
| 4 = 110Vac | | | 198 | 1 = Yes | | 1 | = °F | | | | | 1 = Yes |
| 5 = 230Vac | | | | | | | | | | | | |

CONTROLLERS with DUAL TEMPERATURE MANAGEMENT for NT and LT COLD ROOMS

XLR400

XLR460 | Digital controller for NT and LT cold rooms with dual temperature management

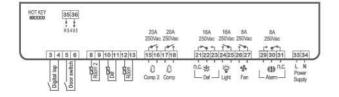
XLR470 Digital controller for LT and LT cold rooms with dual temperature management



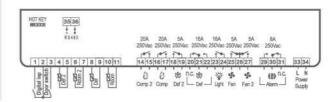
230x210mm

| FEATURES | XLR460 | XLR470 |
|---|-----------------|-----------------|
| First display: n° digits | ± 3 d.p. | ± 3 d.p. |
| Second display: n° digits | ± 4 d.p. | ± 4 d.p. |
| Keyboard: push buttons | 8 | 8 |
| Power supply | 24, 110, 230Vac | 24, 110, 230Vac |
| Probe inputs | | |
| Thermostat | NTC | NTC |
| Thermostat 2 | NTC | NTC |
| Defrost | NTC | NTC |
| Defrost 2 | | NTC |
| Digital inputs | | |
| Alarm, block alarm, pressure switch, start defrost, energy saving, ON/OFF, AUX, holiday | config | config |
| Door switch | pres | pres |
| Relay outputs | | |
| Compressor | 20A | 20A |
| Compressor 2 | 20A | 20A |
| Defrost | 16A | 16A |
| Defrost 2 | | 5A |
| Fans | 8A | 5A |
| Fans 2 | | 5A |
| Light | 16A | 16A |
| Alarm | 8A | 8A |
| Other | | |
| Hot Key/Prog Tool Kit output | pres | pres |
| Serial output | RS485 opt | RS485 opt |
| Buzzer | pres | pres |
| Real time clock | opt | opt |

XLR460



XLR470



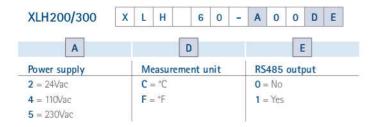




XLH200/300 COOL MATE SERIES: NT and LT APPLICATIONS and MATURING ROOMS with TEMPERATURE/HUMIDITY MANAGEMENT

- · Advanced multifunction controllers with temperature and humidity management
- · Cooling and heating action for safe storage of products
- · Defrost management
- · Possibility of excluding humidity control
- · Dehumidifying action by cooling circuit
- · Running and stopping programmable cycles with different set points (XLH300)
- Automatic cycles of extraction fans (XLH300)
- Direct line power supply 230 (110) Vac. No external transformer required
- · Instant visibility of machine status via display icons
- · Fast and easy wiring
- · Designed to be wall or panel mounted
- · Hot Key or Prog Tool Kit connector for quick and easy programming
- Serial connection to monitoring systems
- 10VA max power absorption
- Dual display with red LED (25,3mm high) and yellow LED (20,3mm high) and 17 icons

HOW to ORDER



CONTROLLERS with TEMPERATURE/HUMIDITY MANAGEMENT for NT and LT COLD ROOMS and MATURING ROOMS

XLH200/300

XLH260 Digital controller for NT and LT cold rooms with temperature and humidity management

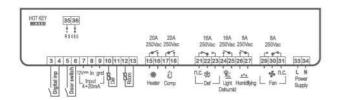
XLH360 Digital controller for maturing rooms with temperature and humidity management and timed cycles



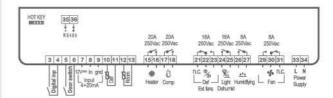
230x210mm

| FEATURES | XLH260 | XLH360 |
|---|--|--|
| First display: n° digits Second display: n° digits Keyboard: push buttons Power supply | ± 3 d.p. ± 4 d.p. 6 24, 110, 230Vac | ± 3 d.p. ± 4 d.p. 8 24, 110, 230Vac |
| Probe inputs | | |
| Thermostat Defrost Humidity | NTC NTC 4÷20mA | NTC NTC 4÷20mA |
| Digital inputs | | |
| Alarm, block alarm, pressure switch, start defrost, energy saving, ON/OFF, AUX, holiday | config | config |
| Door switch | pres | pres |
| Relay outputs | 1997 (1911) | WE 101 |
| Compressor Defrost | 20A 16A | 20A |
| Defrost, extractor fans Fans Heater control Humidifying Dehumidifying, light | 8A 20A 8A 16A config | 16A config 8A 20A 8A 16A config |
| Other | | |
| Hot Key/Prog Tool Kit output Serial output Buzzer | pres RS485 opt pres | pres RS485 opt pres |

XLH260



XLH360





V-KIT: NT and LT APPLICATIONS - SPLIT FORMAT

V-KIT: a wall/panel mounting housing kit for WING vertical keyboards. For remote connection to WING K controllers.

- · Designed for cold rooms applications
- · IP55 against water sprinkles
- · Easy and quick to install

The Dixell V-KIT allows the user to mount the keyboard near to the cold-room door. Connection between the power board (eg. XW60K) and the keyboard is via a 2 core cable. The maximum distance possible is 100m. The door-switch facility is activated when the door is open, the light is automatically switched on, while the compressor, up to 1.5HP, and the evaporator fan can be simultaneously stopped.

The elegant design of this housing gives a quick and effective solution for a variety of different applications, such as cold-rooms, benches and industrial environments where it is difficult to mount the keyboard on a wall. It's available in white and black colours making it suitable for all applications, even where appearance plays part. A main feature is ease of assembly and with IP55 protection, it can be used in environments that may be subject to water spray or rigorous cleaning routines.

The V-KIT is suitable for all vertical format keyboards.

For more information about keyboards and WING modules, please check the information regarding WING series.



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with "on demand" defrost

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MODELS

XW360K - XW370K - T630

74



XRB SERIES: BOTTLE COOLER APPLICATIONS

- · Electronic controllers for bottle cooler
- · Easy and intuitive installation
- · High energy saving thanks to load optimization
- · Algorithms for energy saving work without the use of external sensors
- · Energy saving based on pre-set time interval
- · Automatic set point management after filling the cabinet
- · Compressor working time control
- · Counters of compressor/defrost/fans/light activation time
- · Condenser monitor for maintenance management
- · Anti-sweat heaters management (only for XRB07CX)
- Firmware update via special Prog Key
- · Hot Key or Prog Tool Kit connector for quick and easy programming
- · Serial connection to monitoring systems
- 3VA max power absorption
- · Display with red LED (10,5mm high) and icons



HOW to ORDER



| Α | С | D | E |
|--------------|---------------|------------------|--|
| Power supply | Buzzer | Measurement unit | Connections |
| 0 = 12Vac/dc | 0 = No | C = °C | 3 = Screw |
| 4 = 110Vac | 1 = Yes | F = °F | 9 = Disconnectable |
| 5 = 230Vac | | | Annual Temperature Programme Control of the Control |

CONTROLLERS for STATIC or VENTILATED BOTTLE COOLER APPLICATIONS



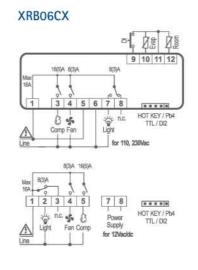
| XRB04CX | Digital controller for static applications |
|---------|--|
| XRB06CX | Digital controller for ventilated applications |
| XRB07CX | Digital controller for ventilated applications with auxiliary output |

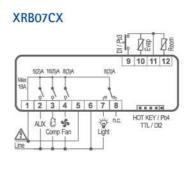


CX: 32x74mm

| FEATURES | XRB04CX | XRB06CX | XRB07CX |
|--|-------------------------|-------------------------|-------------------------------------|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Power supply | 12Vac/dc 110, 230Vac | 12Vac/dc 110, 230Vac | 110, 230Vac |
| Probe inputs | | | |
| Thermostat Defrost Condenser Condenser/AUX | NTC NTC NTC | NTC NTC | NTC NTC NTC NTC on HOT KEY |
| Digital inputs | | | |
| Start defrost, light, AUX, door switch, energy saving, probe | config | config | config |
| Alarm, start defrost, light, AUX, door switch, energy saving, fans, ON/OFF | config | config | config |
| Relay outputs | | | |
| Compressor | 16A | 16A | 16A |
| Fans | | 8A | 8A |
| Light | 8A | 8A | 8A |
| AUX | | | 5A |
| Other | | | |
| Hot Key/Prog Tool Kit output | pres | pres | pres |
| Serial output | TTL | TTL | TTL |
| Buzzer | opt | opt | opt |

XRB04CX 9 10 11 12 16(5)A 8(5)A 16(5)A 8(5)A 16(5)A 16(5)







XB500: BLAST CHILLER and TEMPERATURE MAINTENANCE APPLICATIONS

- Blast chiller controllers that comply with the rules concerning preparation and chilling of foodstuffs (HACCP)
- · Four configurable cycles pre-set
- · Output for remote display to monitor the core temperature of goods
- · Printer output (XB07PR) for temperature and blast chiller cycles reports
- · All different phases monitorated and shown on the display
- · Real time clock
- Hot Key 128 or Prog Tool Kit connector for quick and easy programming
- · Serial connection to monitoring systems
- 5VA max power absorption
- Dual display with red LED (8,0mm high) and yellow LED (5,6mm high) and 14 icons

* START CYCLE 3
DATE : 13/04/2012
PROBES REPORT 15:19
Insr.Probe : -1.4°C
Room Probe : -22.6°C
PROBES REPORT 15:20
Insr.Probe : -2.4°C
Room Probe : -22.6°C
Room Probe : -22.6°C
STAR! PHASE 1 15:20
Room SET : -39.0°C
I.Pro SET : -18.0°C
TIME : 240 min
PROBES REPORT 15:25
Insr.Probe : -2.6°C
ROOM Probe : -22.6°C
ROOM Probe : -23.6°C
ROOM Probe : -23.6°C
PROBES REPORT 15:35
Insr.Probe : -23.6°C
PROBES REPORT 15:40
Insr.Probe : -25.6°C
ROOM Probe : -25.6°C
ROOM Probe : -25.6°C
ROOM Probe : -25.6°C

HOW to ORDER

| Α | В | C | D | E |
|--------------|---------|---------------|------------------|----------------|
| Power supply | Inputs | X-REP | Measurement unit | Printer output |
| 2 = 24Vac | N = NTC | 0 = No | C = °C | o = No |
| 4 = 110Vac | P = PTC | 1 = Yes | F = °F | 1 = Yes |
| 5 = 230Vac | | | | |

X R 5 7 0 I - A R C D E - I For blue display please contact Divel

XB570L Blast chiller controller with four configurable cycles, RTC, printer output and serial output



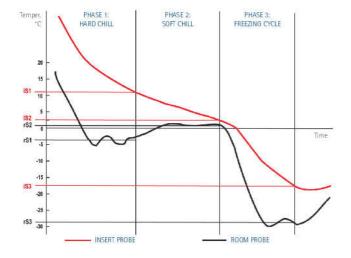
L: 38x185mm

| FEATURES | XB570L | |
|---|-----------------------------|--|
| First display: n° digits | ± 3 d.p. | |
| Second display: n° digits Power supply | ± 4 d.p. 24, 110, 230Vac | |
| Probe inputs | | |
| Thermostat | NTC, PTC | 16A 8A 8A 8A 16A 20A 16A 20A 250Vac 2 |
| Defrost | NTC, PTC | 250Vac 25 |
| Insert 1 | NTC, PTC | SBOTPR |
| Insert 2 | NTC, PTC | |
| Insert 3 | NTC, PTC | Alam Fan De Light Comp Supply |
| Digital inputs | | |
| Alarm | config | |
| Door switch | pres | |
| Relay outputs | | |
| Compressor | 20A | |
| Defrost | 8A | power adapter XB07PR |
| Fans | 8A | power adapter XD071 K |
| Light | 16A | |
| AUX | 8A | Vac IN Vac OUT Supply XB570L |
| Alarm | 16A | 1 N 4 L |
| Other | | Power Supply |
| Hot Key 128/Prog Tool Kit output | pres | |
| Remote display output | X-REP opt | |
| Printer output | XB07PR opt | |
| Serial output | RS485 | |
| Buzzer | pres | |
| Real time clock | pres | |

HARD CHILL, SOFT CHILL, FREEZING, HOLDING

The XB570L has 4 different soft and hard chill cycles in it's memory. These can also be modified by the User.

Each cycle is defined with independent time and temperature parameters to set each control phase and can be combined even with the hold phase. The four cycles are directly selectable from the keyboard. The control of each cycle is carried out using the insert probe or by time duration.





XH200/300 SERIES: NT and LT REFRIGERATED and MATURING ROOM APPLICATIONS with TEMPERATURE/HUMIDITY MANAGEMENT

- · Electronic controllers with temperature and humidity management
- · Cooling and heating action for safe storage of products
- Defrost management
- · Possibility of excluding humidity control
- · Dehumidifying action by cooling circuit
- · Running and stopping programmable cycles with different set points (XH300)
- · Automatic cycles of extraction fans (XH300)
- . Up to 8 push buttons with direct action for user friendly interface
- Direct line power supply 230 (110) Vac. No external transformer required
- Hot Key or Prog Tool Kit connector for quick and easy programming
- Serial connection to monitoring systems
- 10VA max power absorption
- Dual display with red LED (8,0mm high) and yellow LED (5,6mm high) and 14 icons

HOW to ORDER KEYBOARDS 0 C For inox version and blue display on T keyboards please contact Dixell XH240K Α 0 **D** 0 X Н 4 0 K 0 X H 6 0 A 0 CD For inox version and blue display on L format please contact Dixell XH C D Α Buzzer Measurement unit Power supply 2 = 24Vac 0 = No C = °C - %RH 4 = 110Vac 1 = Yes F = °F - %RH 5 = 230Vac

| ICON | MEANING |
|---------------|------------------------------------|
| °C | Celsius degrees |
| °F | Fahrenheit degrees |
| * | Compressor |
| * | Heater control |
| (!) | Alarm |
| 45 | Fans |
| %RH | RH% |
| <u> </u> | Dehumidifying |
| 444 | Humidifying |
| set | Temperature and humidity setting |
| 1 1.7. | Running cycle (for XH300) |
| | Cycle duration setting (for XH300) |
| ** | Light |



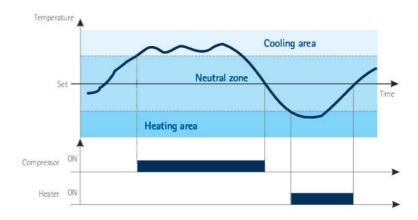
COMPLETE

The dual display and the 14 icons show complete information about the status of the machine. Without the need to enter into the programming mode, all the main functioning of the cooling system are displayed with only one key touch.

XH200: TEMPERATURE and HUMIDITY CONTROL

A neutral zone algorithm is used both for temperature and humidity. Instruments are provided with a compressor output (with defrost) and heating elements to control temperature.

Humidifier and dehumidifier (depending on model) outputs are provided for humidity. This assures both variables are kept inside the set band (neutral zone)

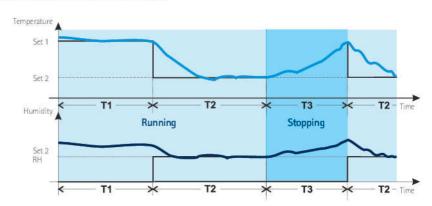


XH300: EXAMPLE of MATURING CYCLE with RUNNING and STOPPING PHASE

T1: pre-cycle only with temperature control

T2: cycle with temperature and humidity control

T3: stopping phase



XH200

CONTROLLER and KEYBOARDS for NT and LT REFRIGERATED ROOMS with TEMPERATURE HUMIDITY MANAGEMENT





| 1 | | |
|---|--|--|
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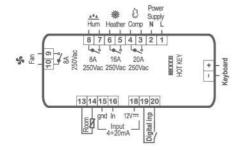
K: OS/GS 38x185mm

100x64mm

| XH240K | Digital controller for NT and LT refrigerated rooms |
|--------|---|
| TH620 | Keyboard (horizontal WING) for XH240K controller |
| VH620 | Keyboard (vertical WING) for XH240K controller |

| FEATURES | XH240K | TH620 | VH620 |
|---|--|--|--|
| First display: n° digits Second display: n° digits Keyboard: push buttons Power supply | on keyboard \pm 3 d.p. on keyboard \pm 4 d.p. 6 (on TH620, VH620) 24, 110, 230Vac | ± 3 d.p. ± 4 d.p. 6 from controller | ± 3 d.p. ± 4 d.p. 6 from controller |
| Probe inputs | | | |
| Thermostat Defrost | NTC | | |
| Humidity | 4÷20mA | | |
| Digital inputs | | | |
| Heater safety, door switch | config | | |
| Relay outputs | | | |
| Compressor Defrost Defrost, extractor fans Fans Heater control Humidifying Dehumidifying, light | 20A 8A 16A 8A | | |
| Other | | | |
| Hot Key/Prog Tool Kit output Serial output Buzzer | pres TTL on keyboard | opt | opt |

XH240K





The POWER MODULE in K FORMAT is AVAILABLE in 2 DIFFERENT VERSIONS

OS: open board





GS: standard plastic housing 190x140x70mm

CONTROLLERS for NT and LT REFRIGERATED and MATURING ROOMS with TEMPERATURE HUMIDITY MANAGEMENT

XH200/300

XH260L XH260V

Digital controllers for NT and LT refrigerated rooms with defrost management

XH360L XH360V Digital controllers for maturing rooms with running and stopping cycles, timed cycles, cooling and heating action and defrost



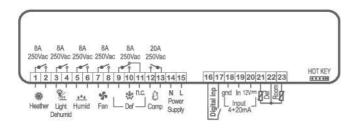


L: 38x185mm

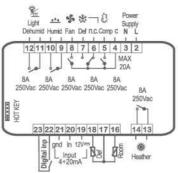
V: 100x64mm

| FEATURES | XH260L | XH260V | XH360L | XH360V |
|------------------------------|-----------------|-----------------|-----------------|-----------------|
| First display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Second display: n° digits | ± 4 d.p. | ± 4 d.p. | ± 4 d.p. | ± 4 d.p. |
| Keyboard: push buttons | 6 | 6 | 8 | 8 |
| Power supply | 24, 110, 230Vac | 24, 110, 230Vac | 24, 110, 230Vac | 24, 110, 230Vac |
| Probe inputs | | | | |
| Thermostat | NTC | NTC | NTC | NTC |
| Defrost | NTC | NTC | NTC | NTC |
| Humidity | 4÷20mA | 4÷20mA | 4÷20mA | 4÷20mA |
| Digital inputs | | | | |
| Heater safety, door switch | config | config | config | config |
| Relay outputs | | | | |
| Compressor | 20A | 8A | 20A | 8A |
| Defrost | 8A | 8A | | |
| Defrost, extractor fans | | | 8A | 8A |
| Fans | 8A | 8A | 8A | 8A |
| Heater control | 8A | 8A | 8A | 8A |
| Humidifying | 8A | 8A | 8A | 8A |
| Dehumidifying, light | 8A | 8A | 8A | 8A |
| Other | | | | |
| Hot Key/Prog Tool Kit output | pres | pres | pres | pres |
| Serial output | TTL | TTL | TTL | TTL |
| Buzzer | opt | opt | opt | opt |

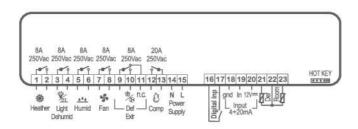
XH260L



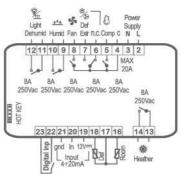
XH260V



XH360L



XH360V

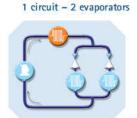


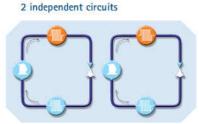


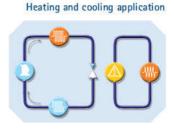
XR400 SERIES: NT and LT APPLICATIONS with DUAL TEMPERATURE MANAGEMENT

- · Advanced multifunction refrigeration controllers with dual temperature management
- Ideal for heating-cooling applications such as bain-marie with under-counter refrigerated storage
- · Designed for a dual refrigeration circuit or 2 independent circuits
- · Integrated defrost management
- · Cooling or heating action settable by user
- Instant visibility of machine status via display icons
- · Hot Key or Prog Tool Kit connector for quick and easy programming
- · Serial connection to monitoring systems
- 4VA max power absorption
- . Dual display with red LED (8,0mm high) and yellow LED (5,6mm high) and 14 icons

TYPICAL APPLICATIONS









HOW to ORDER

| XR400 | X | R | 4 | 0 | С | - | Α | В | С | D | 0 |
|-------|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | D | | | | | | r |

| Α | В | C | D |
|--------------|---------------|---------------|------------------|
| Power supply | Buzzer | RTC | Measurement unit |
| 0 = 12Vac/dc | 0 = No | 0 = No | C = °C |
| 1 = 24Vac/dc | 1 = Yes | 1 = Yes | F = °F |
| 2 = 24Vac | | | |
| 4 = 110Vac | | | |
| 5 = 230Vac | | | |

CONTROLLERS for STATIC or VENTILATED APPLICATIONS with DUAL TEMPERATURE MANAGEMENT

XR400

XR420C | Digital controller for NT static applications with "off cycle" defrost

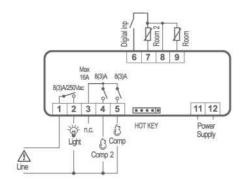
XR460C Digital controller for NT and LT for ventilated applications



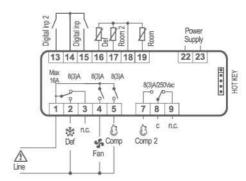
C: 32x74mm

| FEATURES | XR420C | XR460C |
|--|---|--------------------------------------|
| First display: n° digits Second display: n° digits Power supply | ± 3 d.p. ± 4 d.p. 24, 110, 230Vac | ± 3 d.p. ± 4 d.p. 12, 24Vac/dc |
| Probe inputs | | |
| Thermostat Thermostat 2 Defrost | NTC/PTC NTC/PTC | NTC/PTC NTC/PTC NTC/PTC |
| Digital inputs | | |
| Safety, start defrost, door switch | config | 2 x config |
| Relay outputs | | |
| Compressor Compressor 2 Defrost Fans Light | 8A 8A | 8A 8A 8A |
| Other | 1 | |
| Hot Key/Prog Tool Kit output Serial output Buzzer Real time clock | pres TTL opt opt | pres ΠL opt opt |

XR420C



XR460C







XR700: NT and LT APPLICATIONS with HACCP FUNCTION

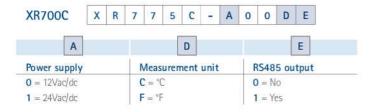
- · Digital controller with HACCP function
- · Monitoring, signalling and recording of the critical temperature
- Real time display of the peaks and their duration
- · Correct storage of products
- Hot Key or Prog Tool Kit connector for quick and easy programming
- · Serial connection to monitoring systems
- 4VA max power absorption
- Dual display with red LED (8,0mm high) and yellow LED (5,6mm high) and 13 icons

COMPLETE

The **dual display** with **13 icons** shows complete information about the status of the machine. Without the need to enter into the programming mode, all the main functioning of the cooling system is displayed with only one key touch.



HOW to ORDER



XR775C | Digital controller for NT and LT ventilated applications

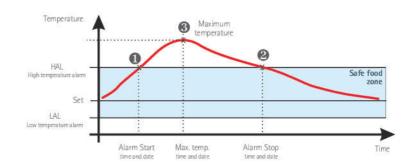


C: 32x74mm

| FEATURES | XR775C | |
|--|--|----------------------------------|
| First display: n° digits Second display: n° digits Power supply | ± 3 d.p. ± 4 d.p. 12, 24Vac/dc | |
| Probe inputs | | g |
| Thermostat Defrost Display | NTC NTC NTC | 13 14 15 16 17 18 19 20 21 22 23 |
| Digital inputs | | Max 8(3)A 8(3)A 8(3)A 8(3)A |
| Alarm, door switch, light, defrost Door switch | config pres | 1 2 3 4 5 7 8 9 |
| Relay outputs | | Alarm c n.c. |
| Compressor Defrost Fans Light, alarm | 8A 8A 8A 8A config | Def Scomp Fan Line |
| Other | | |
| Hot Key/Prog Tool Kit output Serial output Buzzer Real time clock | pres TTL, RS485 opt pres pres | |

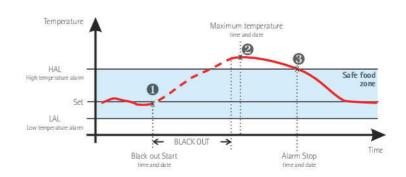
EXAMPLE of HIGH TEMPERATURE ALARM

When a high (or low) temperature alarm occurs, instrument records the start ① and end time ②, the date and the maximum (or minimum) temperature ③ reached.



BLACKOUT ALARM

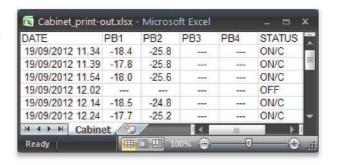
If, after a blackout, the temperature is higher than the alarm value, the start of the blackout ① and the end of alarm temperature ② together with the max temperature reached ③ are recorded.





XDL: TEMPERATURE and STATUS RECORDING

- Temperature and status recording module for refrigerating applications that works in accordance to HACCP rules
- Connection to Dixell instruments equipped with the serial output or combined with the XJDL40D probe module
- . Monitoring of temperature (up to 4), alarms and digital inputs is simple and intuitive
- Stand-alone operation in a 4 DIN module XJDL40D
- · Fast and simple mounting
- Recorded data download on a USB driver: txt format that can also be displayed in EXCEL®
- Data recording: up to 1 year with sampling up to 16 minutes (settable)
- TTL and RS485 inputs with internal converter (on PW-DL power supply or XJDL40D)
- Temperature recording kit availables on request with minimum quantity 20 pieces
- 5VA max power absorption
- Dual display with red LED (8,0mm high) and yellow LED (5,6mm high) and 17 icons



HOW to ORDER

5 = 230Vac

| Power supply | | | | E | atte | ry oı | utpu | t | | = | | | | | | N | /leas | | ent uni |
|--------------|---|---|---|---|------|-------|------|---|-----|---|---|----|----|---|---|---|-------|---|---------|
| A | | | | | | | | | | В | | | | | | | | | D |
| XJB-KIT | X | D | L | 0 | 1 | - | X | J | В | = | K | 11 | T | - | Α | 0 | 0 | D | 0 |
| XJ-KIT | X | D | L | 0 | 1 | 140 | X | J | 140 | K | 1 | T | =0 | Α | 0 | 0 | D | 0 | |
| PW-KIT | X | D | L | 0 | 1 | - | P | W | - | K | 1 | T | - | Α | 0 | 0 | D | 0 | |
| XJDL40D | X | J | D | L | 4 | 0 | D | - | A | В | 0 | D | 0 | | | | | | |
| XDL01 | X | D | L | 0 | 1 | 173 | 0 | 0 | 0 | D | 0 | | | | | | | | |

TEMPERATURE and STATUS RECORDING MODULE

| XDL01 | Temperature and status recording module (with cable CAB/RS1, 1m included) that works with Dixell instruments equipped with the serial output (via PW-DL) or combined with the XJDL40D probe module |
|-------|--|
| | |

XJDL40D

Probe and status acquisition module for XDL01 with external battery input and female connector included







45x70mm

D: 4 DIN Rail

TEMPERATURE RECORDING KIT

XDL01-PW-KIT

Kit composed of XDL01, PW-DL and XDL-KEY

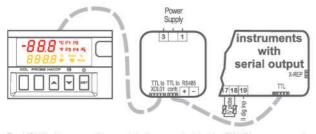
XDL01-XJ-KIT

Kit composed of: XDL01, XJDL40D, XDL-KEY and 2 NG6 probes, 3m

XDL01-XJB-KIT

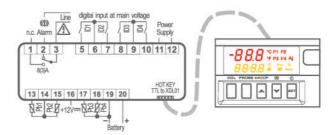
Kit composed of: XDL01, XJDL40D, BA6H, XDL-KEY and 2 NG6 probes, 3m

XDL01 - PW-DL



The XDL01 data recording module is connected to the PW-DL power supply and is also an interface with Dixell instruments with TTL or RS485 serial output

XDL01 - XJDL40D



The XDL01 data recording module is directly connected to the XJDL40D probe module

ACCESSORIES



PW-DL

Power supplier (24, 230Vac) for XDL01 module (with CAB/DL2 cable, 2m included) works as a gateway between the XDL01 and Dixell instruments equipped with TTL or RS485 serial output How to order: PW-DL-20000 (for 24Vac)

PW-DL-50000 (for 230Vac)



XDL-KEY

USB pendrive for XDL01



BA6H

Battery for XJDL40D of 1.2Ah, 6 hours of backup



BA24H

Battery for XJDL40D of 4.0Ah, 24 hours of backup



XW700 SERIES: PHARMACEUTICAL APPLICATIONS

- · Digital controllers for pharmaceutical cabinets
- Also ideal for applications up to -100°C
- · Temperature, alarms and load status recording
- · LCD graphic interface (or Touch Screen on request) with panel or wall mounting
- · Last 24 hours temperature graphic display
- · Battery backup in case of power supply failure
- Data download on USB pendrive: txt format compatible with EXCEL®
- · Data recording: up to 1 year with sampling every 15 minutes
- Programmable sampling time from 3 to 60 minutes
- · Hot Key or Prog Tool Kit connector for quick and easy programming
- · Serial connection to monitoring systems
- · 10VA max power absorption

HOW to ORDER A B 0 D 0 XW700 Α В D Power supply Light relay Measurement unit Inputs 4 = 110Vac N = NTC16A C = °C 5 = 230Vac L = NTC 16A neon F = °F S = Pt1000 16A T = Pt1000 16A neon For TOUCH SCREEN interface please contact Dixell G W 8 **VGW870** 7 В В Kind of mounting P = Panel

W = Wall

CONTROLLERS and GRAPHIC DISPLAY for VENTILATED PHARMACEUTICAL APPLICATIONS

XW700

| XW737K | Digital controller for ventilated pharmaceutical applications |
|--------|---|
| XW777K | Digital controller for ventilated pharmaceutical applications with defrost and auxiliary relay management |
| VGW870 | Remote keyboard with LCD graphic display and dedicated interface for medical applications for XW700 controllers (IP65 front protection) |



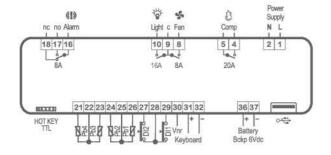


K: 8 DIN Rail

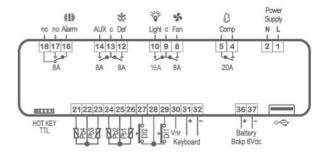
VG: 82x156mm

| FEATURES | XW737K | XW777K | VGW870 |
|--|---------------|---------------|--------------------|
| Display | LCD on VGW870 | LCD on VGW870 | LCD - 240x96pixels |
| Power supply | 110, 230Vac | 110, 230Vac | from controller |
| Probe inputs | | | |
| Thermostat | NTC, Pt1000 | NTC, Pt1000 | |
| Defrost | NTC, Pt1000 | NTC, Pt1000 | |
| Product 1 | NTC, Pt1000 | NTC, Pt1000 | |
| Product 2 | NTC, Pt1000 | NTC, Pt1000 | |
| Digital inputs | | | |
| Alarm, start defrost, door switch, pressure switch | 2 x config | 2 x config | |
| Relay outputs | | | |
| Compressor | 20A | 20A | |
| Defrost | | 8A | |
| Fans | 8A | 8A | |
| Light | 16A | 16A | |
| Alarm | 8A | 8A | |
| AUX | | 8A | |
| Other | | | |
| Hot Key/Prog Tool Kit output | pres | pres | |
| Visokey output | | | pres |
| USB output | pres | pres | |
| Serial output | TTL | TTL | |
| Buzzer | on keyboard | on keyboard | pres |
| Real time clock | with battery | with battery | |
| Backup battery input | pres | pres | |

XW737K



XW777K



ACCESSORIES



XDL-KEY

USB pendrive for XW700 controllers



CAB-USB10

USB extended cable, 1m with plastic cap



XR20/60 & XW20/60/300: NT and LT REFRIGERATED TRUCKS APPLICATIONS

- Digital controllers designed for refrigerated trucks (9÷40Vdc power supply)
- Maximum and minimum temperature recording/visualisation
- Possibility of controlling one LT and one NT compartment or one refrigerated and one heated compartment (XW300)
- "On demand" defrost for optimum defrost cycles management (XW300)
- Service hours count for system maintenance cycles (XW300)
- Thermostatic command for shutter opening (XW300)
- · Hot Key or Prog Tool Kit connector for quick and easy programming
- · Serial connection to monitoring systems
- 3VA max power absorption (10VA max for XW300)
- . Display with red LED, 13,2mm high (red LED, 10,5mm high and icons for CX format)

HOW to ORDER 3 B C D E XR20/60 0 C X -For blue display please contact Dixell C D X-REP output (excludes TTL output) Inputs Measurement unit Connections Buzzer N = NTCC = °C 0 = No 0 = Screw P = PTC 1 = Yes No 6 = Faston **2** = No Yes 3 = Yes Yes XW20/60 CD 3 For blue display please contact Dixell C B D Inputs Buzzer Measurement unit N = NTC0 = NoC = °C P = PTC 1 = Yes F=°F **KEYBOARD** 6 3 -A For blue display please contact Dixell 3 N C D E XW300 W 3 A C D 4÷20mA Buzzer Housing Measurement unit Built-in RS485 **0** = No 0 = Open board "OS" $\mathbf{C} = {}^{\circ}\mathbf{C}$ 0 = No No $F = {}^{\circ}F$ 1 = Yes 2 = "GS" housing 182x142x76mm 2 = No Yes 4 = "GS" housing 225x180x84mm 4 = Yes No 6 = Yes Yes

CONTROLLERS for STATIC and VENTILATED APPLICATIONS on REFRIGERATED TRUCKS

XR20/60 & XW20/60

XR20CX XW20L

Digital controllers for NT static applications with "off cycle" defrost

XR60CX XW60L

Digital controllers for NT and LT ventilated applications with defrost management

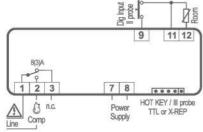




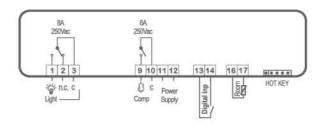
CX: 32x74mm L: 38x185mm

| FEATURES | XR20CX | XW20L | XR60CX | XW60L |
|--|---------------------|----------|---------------------|----------|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Power supply | 9÷40Vdc | 9÷40Vdc | 9÷40Vdc | 9÷40Vdc |
| Probe inputs | | | | |
| Thermostat | NTC, PTC | NTC, PTC | NTC, PTC | NTC, PTC |
| Defrost | | | NTC, PTC | NTC, PTC |
| Condenser | NTC, PTC on HOT KEY | | NTC, PTC on HOT KEY | |
| Digital inputs | | | | |
| Alarm, start defrost, door switch, pressure switch | config | config | config | config |
| Relay outputs | | | | |
| Compressor | 8A | 8A | 8A | 8A |
| Defrost | | | 8A | 8A |
| Fans | | | 8A | 8A |
| Light | | 8A | | 8A |
| Other | | | | |
| Hot Key/Prog Tool Kit output | pres | pres | pres | pres |
| Remote display output | X-REP opt | | X-REP opt | |
| Serial output | TTL | | TTL | |
| Buzzer | opt | opt | opt | opt |

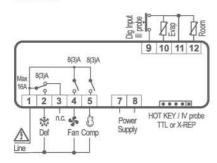
XR20CX



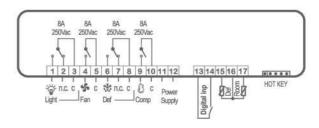
XW20L



XR60CX



XW60L



XW300

CONTROLLERS and KEYBOARD for VENTILATED APPLICATIONS with "on DEMAND" DEFROST on REFRIGERATED TRUCKS





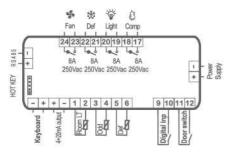
K: 05/G5

38x185mm

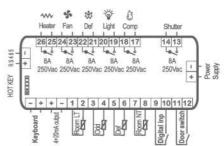
| XW360K | Digital controller with NT and LT ventilated applications with "on demand" defrost |
|--------|---|
| XW370K | Digital controller with NT and LT ventilated applications with "on demand" defrost, heater and shutter management |
| TG20 | Keyhaard for XW300 controllers |

| FEATURES | XW360K | XW370K | T630 |
|--|----------------------|----------------------|-----------------|
| Display: n° digits | on keyboard ± 3 d.p. | on keyboard ± 3 d.p. | ± 3 d.p. |
| Power supply | 9÷40Vdc | 9÷40Vdc | from controller |
| Probe inputs | | | |
| Thermostat NT thermostat | NTC | NTC NTC | |
| Defrost | NTC | NTC | |
| "on demand" defrost | NTC | NTC | |
| Digital inputs | | | |
| Generic alarm, block alarm, pressure switch, start defrost, change working mode, heater output | config | config | |
| Door switch | pres | pres | |
| Relay outputs | | | |
| Compressor | 8A | 8A | |
| Defrost | 8A | 8A | |
| Fans | 8A | 8A | |
| Heater control | | 8A | |
| Light | 8A | 8A | |
| Shutter | | 8A | |
| Other | | | |
| Hot Key/Prog Tool Kit output | pres | pres | |
| Serial output | RS485 opt | RS485 opt | |
| Analog output | 4÷20mA opt | 4÷20mA opt | |
| Buzzer | on keyboard | on keyboard | opt |

XW360K



XW370K



Ine I

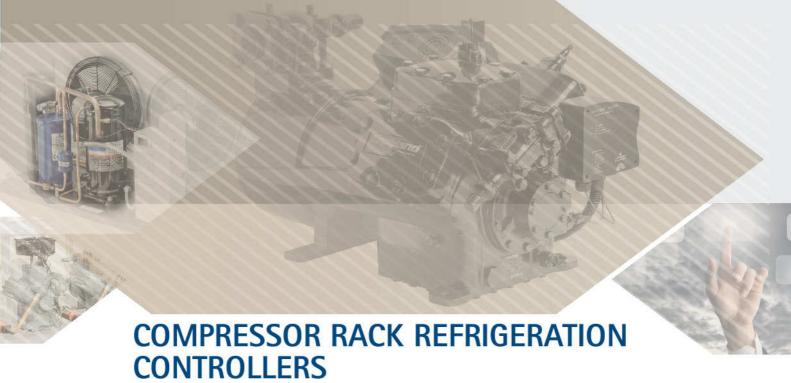
The POWER MODULES in K FORMAT are AVAILABLE in 2 DIFFERENT VERSIONS

OS: open board



GS: with plastic housing 182x142x76mm or 225x180x84mm





SECTION INDEX

FUNCTIONS

XEV02 - Digital™ compressor applications 76 Driver slave for Digital™ compressor management 77 XEV02D XC10/30 - condensing unit applications 78 79 Condensing unit controller XC10CX Condensing unit controller with fans management XC30CX 79 Accessory CAB/HK 79 XC400/600 - up to 6 compressor/fan output applications 80 also with inverter management Controller for managing up to 4 compressors/fans XC640D 82 Controllers for managing up to 5 compressors/fans XC450CX - XC650CX - XC652CX 82 Controllers with Digital™ compressor management XC645CX - XC645D 82 Controller for managing up to 6 compressors/fans XC660D 83 Keyboard for controllers in D format VC660 83 XC1000 - up to 15 compressor/fan output applications 84 Controller for simultaneous management of up to XC1008D 88 8 compressors and fans Controller for simultaneous management of up to XC1011D 11 compressors and fans 88 Controller for simultaneous management of up to 15 compressors and fans XC1015D 89 Graphic display for XC1000 controllers VGC810 89 iProRACK - up to 2 circuit and 6 compressor per circuit applications 90 Controllers for management of up to 2 circuits IPR208D - IPR215D and 6 compressors per circuit 92 Graphic display for iProRACK controllers **VGIPG** 92

MODELS



XEV02: DIGITAL™ COMPRESSOR APPLICATIONS

- Driver slave for Digital[™] compressor management
- Compatible with XC400/600, XC1000 and iProRACK controllers
- · Optimal management of "Demand Cooling" applications
- Last 10 alarms recording (kind, duration)
- Temperature analog inputs (NTC86K, Pt1000)
- Pressure analog inputs (0÷5V, 4÷20mA)
- Alarm management (visual or through digital output)
- Digital inputs (1 insulated, 1 voltage)
- Hot Key or Prog Tool Kit connector for quick and easy programming
- · Serial connection to monitoring systems
- 6VA max power absorption
- · Display with red LED (10,5mm high) and icons

HOW to ORDER

| XEV02D X | E V 0 2 D - | A B C D 0 | |
|-------------------|-------------------|-------------------|-----------------|
| A | В | С | D |
| Power supply | Temperature probe | Pressure probe | Measurement uni |
| 2 = 24Vac | N = NTC86K | 0 = No | B = Bar/°C |
| 4 = 110Vac | P = Pt1000 | 1 = 0÷5V | P = PSI/°F |
| 5 = 230Vac | | 2 = 4÷20mA | H = KPA/°C |
| | | 3 = PP11 | |
| | | 4 = PP30 | |
| | | 5 = PPR 15 | |
| | | 6 = PPR30 | |

DRIVER SLAVE for DIGITAL™ COMPRESSOR MANAGEMENT

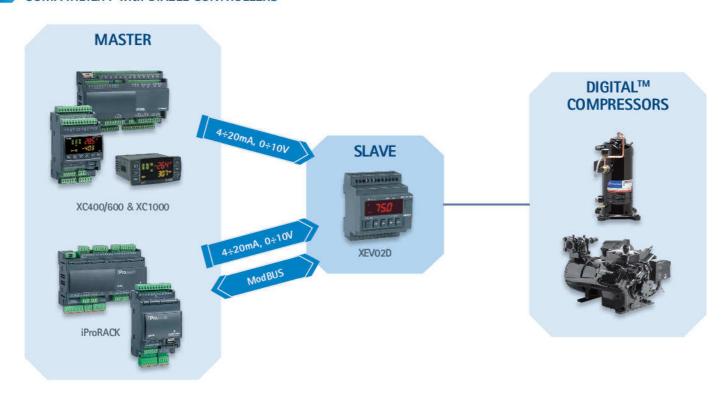
XEV02D Driver slave for Digital™ compressor management with triac and open collector outputs



D: 4 DIN Rail

| FEATURES | XEV02D | |
|--|----------------------------------|---|
| Display: n° digits Keyboard: push buttons Power supply | ± 3 d.p. 4 24, 110, 230Vac | RS485 n.c. c n.o. DI2 Power Supply + 1 - 1 1 1 N 1 L |
| Probe inputs | | 1 2 4 5 6 8 9 11 12 |
| Suction pressure Discharge line temperature (DLT) | 4÷20mA, 0÷5V NTC86K, Pt1000 | 8(3)A |
| Digital inputs | | |
| Free of voltage | pres | |
| High voltage | pres | |
| Relay outputs | | Lance Control of the |
| Alarm | 8A config | HOT KEY |
| Other | | |
| Triac output | pres | |
| Open collector output | config | 13 14 15 16 17 18 19 20 23 24 |
| Hot Key/Prog Tool Kit output | pres | Out Open Input Collector 4+20 man 10+50 |
| Serial output | RS485 | Substitution of the Collector Input Collector 4+20mA(0+5) |
| Buzzer | pres | 1.2011/0.07 |

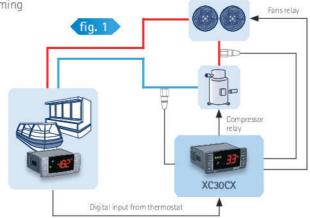
COMPATIBILITY with DIXELL CONTROLLERS





XC10/30 SERIES: CONDENSING UNIT APPLICATIONS

- · Electronic controllers for condensing unit management with alarm log
- · Smart error pressure probe management
- External trigger signal to enable regulation (fig. 1)
- · Flooded start protection
- · Suction and discharging lines temperature control
- · Compressor working time and activation counters
- · Safety control of high pressure and high condensing/suction temperature
- · Fan cycling management to share the working load
- · Direct access to alarm menu, working time and load activation
- Management of 1 compressor and up to 2 fans (XC30CX)
- Hot Key or Prog Tool Kit connector for quick and easy programming
- 3VA max power absorption
- · Display with red LED (10,5mm high) and icons



HOW to ORDER

| XC10/30 X | C 0 C X - A | B C O E | |
|-------------------|------------------|---------------|--------------------------------------|
| Α | В | С | Е |
| Power supply | Measurement unit | Buzzer | Input |
| 4 = 110Vac | B = Bar/°C | 0 = No | G = 0÷5V (suction)/NTC (condensing) |
| 5 = 230Vac | P = PSI/°F | 1 = Yes | H = 0÷5V (suction)/0÷5V (condensing) |
| | H = KPA/°C | | S2 |

CONDENSING UNIT CONTROLLERS

XC10CX Condensing unit controller with 1 compressor

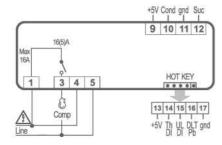
XC30CX Condensing unit controller with 1 compressor and 2 fans



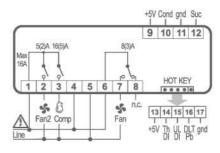
CX: 32x74mm

| FEATURES | XC10CX | XC30CX |
|--|--------------------------|--------------------------|
| Display: n° digits Power supply | ± 3 d.p. 110, 230Vac | ± 3 d.p. 110, 230Vac |
| Probe inputs | | |
| Suction pressure Condensing pressure Discharge temperature | 0÷5V 0÷5V, NTC PTC | 0÷5V 0÷5V, NTC PTC |
| Digital inputs | | |
| High pressure safety Thermostat | pres pres | pres pres |
| Relay outputs | | |
| Compressor Fans Fans 2 | 20A | 20A 8A 5A |
| Other | | |
| Hot Key/Prog Tool Kit output Buzzer | pres opt | pres opt |

XC10CX

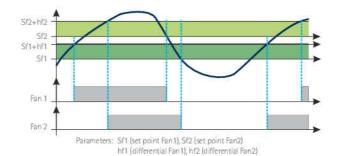


XC30CX



FAN MANAGEMENT

XC30CX has 2 outputs to drive 2 different condensing fans. A smart fan algorithm shares the fan working time between the outputs



ACCESSORY

CAB/HK

Adapter cable, 5 pins for Hot Key input, 0,5m









XC400/600 SERIES: up to 6 COMPRESSOR/FAN OUTPUT APPLICATIONS also with INVERTER MANAGEMENT

- · Electronic controllers for compact compressor racks management also with inverter
- Compressor types: Digital[™], multi-stages, differing power, semi-hermetic, scroll and screw
- · Proportional band or neutral zone control
- Floating condensing pressure control depending on the external temperature
- · High configurability and flexibility
- · Automatic switch-off of the compressors in case of high condensing pressure/temperature
- · Silent mode function for fans during the night
- · Correct lubrication automatic restore cycle
- · Safer control with low pressure electronic pressure switch
- Type of gas setting: to control temperature or pressure
- · Hot Key or Prog Tool Kit connector for quick and easy programming
- Serial connection to monitoring systems
- 5VA max power absorption
- Dual display with red LED (8,5mm high) and yellow LED (7,5mm high) and 17 icons

HOW to ORDER

XC400/600CX A B C D E X C XC600D X В 1 DE 6 VC660 C 6 6 0 0 0 C

| A | В | С | | D | E |
|-------------------|------------------|---------------|------------------|----------------|-------------------------------------|
| Power supply* | Measurement unit | Buzzer | TRIAC voltage** | Analog outputs | Input |
| 0 = 12Vac/dc | C = °C | 0 = No | 0 = 110÷230Vac | No | A = PP11 (only for XC450CX) |
| 1 = 24Vac/dc | F = °F | 1 = Yes | 1 = 110÷230Vac | Yes | B = PP30 (only for XC450CX) |
| 4 = 110Vac | B = Bar | | 2 = 24Vac | No | C = NTC |
| 5 = 230Vac | P = PSI | | 3 = 24Vac | Yes | E = 4÷20mA |
| | H = KPA | | 4 = No TRIAC | No | F = PP11 (suction)/PP30 (discharge) |
| | | | 5 = No TRIAC | Yes | H = 0÷5V (ratiometric) |

^{*} O, 1 (only for XC400CX and XC600CX)

^{4, 5 (}only for XC600D)

^{** 0, 1, 2, 3 (}only for XC645)

^{4, 5 (}not for XC645)

TYPE of COMPRESSOR RACKS

The XC400/600 series, thanks to a powerful and complete range, ensures optimal management of compact compressor racks:

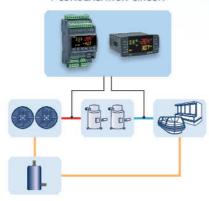
- · with compressors and fans also with suction or discharge inverter;
- · with 2 discharge and 1 suction also with inverter;
- with Digital[™] compressors.

Example of circuits managed by the XC400/600 series

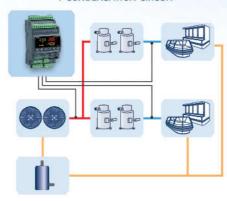
XC645CX - XC645D APPROVED FOR



1 SUCTION CIRCUIT 1 CONDENSATION CIRCUIT



2 SUCTION CIRCUITS 1 CONDENSATION CIRCUIT



CONNECTIONS

2 different version of terminal block are available depending on the model of the controllers:

Screws for XC400CX



Disconnectable for XC600CX

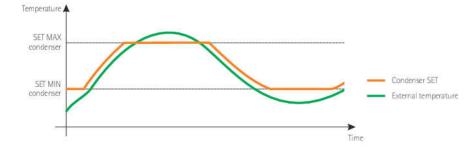


Screw disconnectable for XC600D



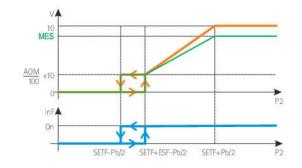
FLOATING CONDENSING

The dynamic set point guarantees excellent plant efficiency, taking real operational conditions into consideration. The condensing set point is automatically adjusted according to the external temperature, keeping the safety values, to optimize the condensing temperature. The reduction of this temperature entails a reduction of the pressure gap between suction and condensing decreasing the consumption of compressors and saving energy.



FAN FUNCTIONING DURING NIGHT MODE

This special function allows the maximum fan speed to be decreased, which reduces plant noise. Thanks to the MES (Maximum output during Energy Saving) the maximum fan speed is reduced during the night.



SETF: supply pressure setting to be maintained

Pb/2: regulation band centred around the setting

AOM: minimum allowed speed for the fans

inF: relay set as fan inverter

P2: condensing pressure (temperature) probe

V: analogical output value set as 0÷10V

ESF: energy saving differential for fan regulation

XC400/600

Up to 5 COMPRESSOR/FAN COMPRESSOR RACK CONTROLLERS also with INVERTER MANAGEMENT



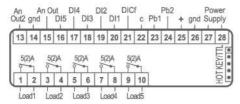


| CX: 32x74mm | D: 4 DIN Ra |
|-----------------|-------------|
| CA. 32A/ TITITI | D. T DIN NO |

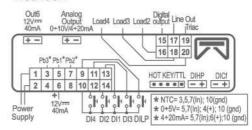
| XC450CX | Digital controller for managing up to 5 compressors or fans | | |
|---------|--|--|--|
| XC640D | Digital controller for simultaneous management of up to 4 compressors and fans | | |
| XC645CX | Digital controllers for Digital [™] compressor management | | |

| FEATURES | XC450CX | XC640D | XC645CX | XC645D |
|---|--|---|---|--|
| First display: n° digits Second display: n° digits Power supply | ± 4 d.p. ± 4 d.p. 12, 24Vac/dc | ± 4 d.p. ± 4 d.p. 110, 230Vac | ± 4 d.p. ± 4 d.p. 12, 24Vac/dc | ± 4 d.p. ± 4 d.p. 110, 230Vac |
| Probe inputs | | | | |
| Suction Suction 2 Condensing Configurable | 0÷5V, 4÷20mA, NTC 0÷5V, 4÷20mA, NTC | 0÷5V, 4÷20mA, NTC 0÷5V, 4÷20mA, NTC NTC | 0÷5V, 4÷20mA, NTC 0÷5V, 4÷20mA, NTC NTC | 0÷5V, 4÷20mA, NTC 0÷5V, 4÷20mA, NTC NTC |
| Digital inputs | | | | |
| Low pressure switch High pressure switch Alarm Configurables | 5 | 1 1 4 2 | 1 1 4 1 | 1 1 5 2 |
| Relay outputs | | | | |
| Loads | 5 x 5A | 4 x 5A | 4 x 5A | 4 × 5A |
| Other outputs | | | | |
| Digital™compressor Inverter-compressor Inverter-fans Load Hot Key/Prog Tool Kit Serial | pres TTL | 4÷20mA/0÷10V opt 4÷20mA/0÷10V opt pres RS485 | TRIAC 4÷20mA/0÷10V opt 12V/40mA pres TTL | TRIAC 4÷20mA/0÷10V opt 4÷20mA/0÷10V opt pres RS485 |
| Other | | | | |
| Remote keyboard Alarms Buzzer Connection kit | last 10 opt | VC660 last 10 pres | last 10 opt CWC15-KIT, CWC30-KIT, CAB/CJ15, CAB/CJ30 | VC660 last 10 pres |

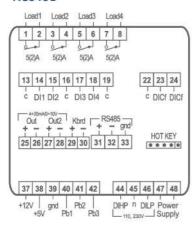
XC450CX



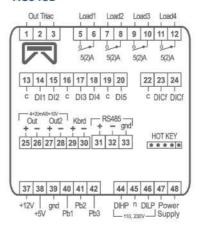
XC645CX



XC640D



XC645D



Up to 6 COMPRESSOR/FAN COMPRESSOR RACK CONTROLLERS and KEYBOARD also with INVERTER MANAGEMENT

XC600

| XC650CX | Digital controller for simultaneous management of up to 5 compressors and fans |
|---------|--|
| XC652CX | Compressor rack digital controller with 2 suctions |
| XC660D | Digital controller for simultaneous management of up to 6 compressors and fans |
| VC660 | Keyboard for XC600D controllers |







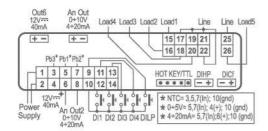
CX: 32x74mm

c74mm D: 4 DIN Rail

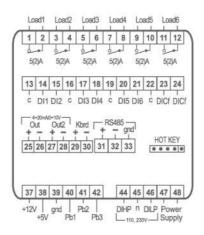
Rail 100x64mm

| FEATURES | XC650CX | XC652CX | XC660D | VC660 |
|--|---|---|---|---|
| First display: n° digits Second display: n° digits Power supply | ± 4 d.p. ± 4 d.p. 12, 24Vac/dc | ± 4 d.p. ± 4 d.p. 12, 24Vac/dc | ± 4 d.p. ± 4 d.p. 110, 230Vac | \pm 4 d.p. \pm 4 d.p. from controller |
| Probe inputs | | | | |
| Suction Suction 2 Condensing Configurable | 0÷5V, 4÷20mA, NTC 0÷5V, 4÷20mA, NTC NTC | 0÷5V, 4÷20mA, NTC 0÷5V, 4÷20mA, NTC NTC | 0÷5V, 4÷20mA, NTC 0÷5V, 4÷20mA, NTC 0÷5V, 4÷20mA, NTC | |
| Digital inputs | | | | |
| Low pressure switch High pressure switch Alarm Configurables | 1 1 4 | 1 1 4 1 | 1 1 6 2 | |
| Relay outputs | 4.0 | 1000 | | |
| Loads | 5 x 5A | 5 x 5A | 6 x 5A | |
| Other outputs | | | | |
| Digital [™] compressor Inverter-compressor Inverter-fans Load Hot Key/Prog Tool Kit Serial | 4÷20mA/0÷10V opt 4÷20mA/0÷10V opt 12V/40mA pres TTL | 4÷20mA/0÷10V opt 4÷20mA/0÷10V opt 12V/40mA pres TTL | 4÷20mA/0÷10V opt 4÷20mA/0÷10V opt pres RS485 | |
| Other | | | | |
| Remote keyboard Alarms Buzzer Connection kit | last 10 opt CW15-KIT, CW25-KIT, CAB/CJ15, CAB/CJ30 | last 10 opt CW15-KIT, CW25-KIT, CAB/CJ15, CAB/CJ30 | VC660 last 10 pres | opt |

XC650CX - XC652CX



XC660D

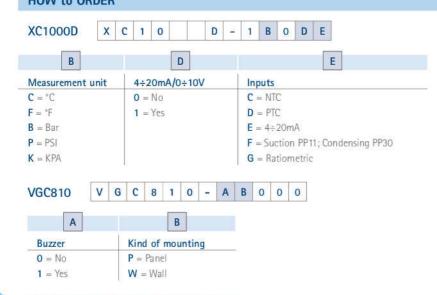




XC1000 SERIES: up to 15 COMPRESSOR/FAN OUTPUT APPLICATIONS

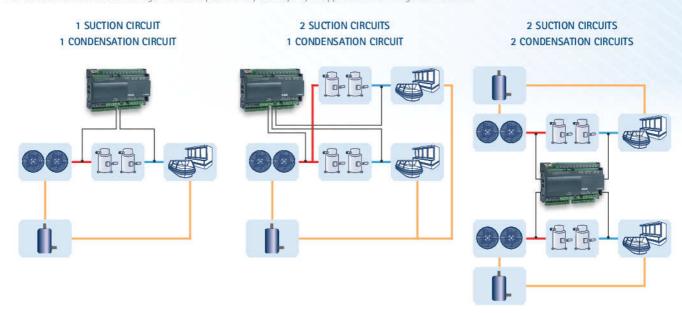
- Electronic controllers for compressors and condensing fans management of medium-large compressor racks
- · Scroll, semi-hermetic, multi stages, with different power and screw compressor management
- Concise information about the variables of the compressor rack through the VISOGRAPH display
- · 2 analogue outputs for frequency compressors
- · 2 analogue outputs for inverter for fans
- · Hourly run time signals for maintenance
- · Sub-cooling management
- · Subcritical CO, regulation
- · Compressor unloading in case of high condensing pressure alarm
- · Suction superheat calculation with alarm management and possible stop of compressors
- · Liquid injection valve activation to increase superheat
- · Alarm management with absolute and relative pressure
- · Hot Key or Prog Tool Kit connector for quick and easy programming
- · Serial connection to monitoring systems
- 12VA max power absorption

HOW to ORDER



KINDS OF CIRCUIT

The XC1000D series is able to manage in the best possible way the majority of applications for refrigeration circuits.

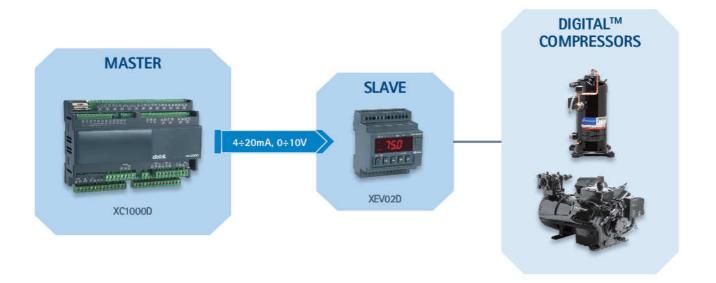


CO₂ REGULATION

CO, use is increasing thanks to the advantages it offers in cooling plants. For this reason there is also a greater demand for accessories. CO₂ Thanks to special algorithms, the XC1000D series can manage and monitor CO, plants that work in cascade connection with sub-critical cycle.

COMPATIBILITY with DIGITAL™ COMPRESSORS

Thanks to its powerful hardware platform and to the advanced algorithms, the XC1000D family is able to drive the majority of compressor racks present in the market. An interesting match is the one with Dixell XEV02D driver that allows management of compressor racks equipped with DigitalTM compressors. In these applications, by using the modulating capacity, the plant receives the optimum refrigeration power thereby reducing consumption.

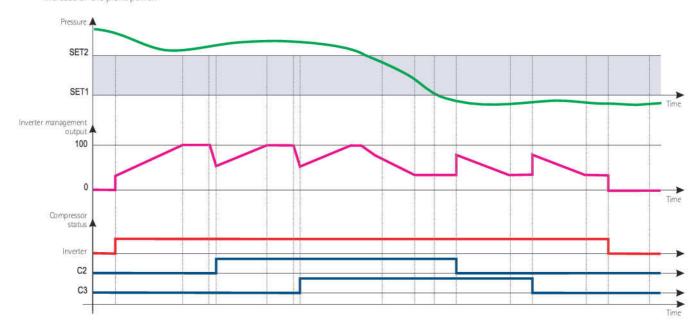


ENERGY SAVING MANAGEMENT

The XC1000D series gives to the user several solutions that let you to manage energy savings. The controllers have a special algorithm that lets you to optimize the efficiency of the plant, ensuing energy savings. The following are a range of the most important solutions that Dixell offers to customers to achieve energy savings.

COMPRESSORS with INVERTER

When the plant needs more power (when the temperature gets out of the band) the inverter compressor frequency increases. If this is not enough, the other compressors (C2, C3, ...) will be activated in sequence. At the same time the controller will modulate the inverter compressor frequency in order to have a uniform increase of the plant power.

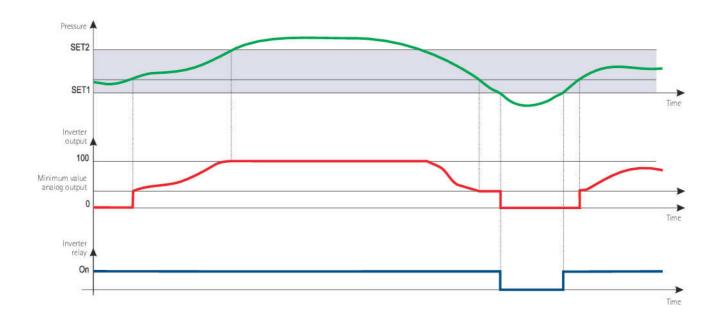


EC FANS - INVERTER

In this case all condensing fans are driven by one inverter or are EC fans.

The inverter power is proportional to the condensing pressure value and the analog output is modulated proportionally to the condensing pressure/temperature over the set (SET1÷SET2). Under SET1 the output will be switched off, over the SET2 the output is at 100%.

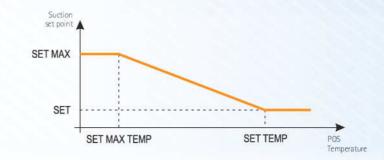
The relay set as inverter will be activated if the condensing pressure/temperature is higher than the SET1 and switched off when the condensing pressure is lower than the SET1. It can be used to allow the inverter regulation.



SUCTION DYNAMIC SET POINT

Suction temperature/pressure optimization can depending on retail space temperature.

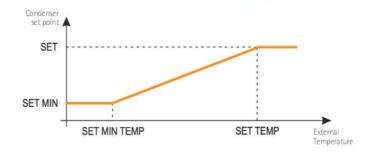
The dynamic set point guarantees excellent plant efficiency, considering the real operational conditions. The plant modifies the suction temperature/pressure according to the retail space temperature so the refrigeration power changes depending on the real thermodynamic exchange.



CONDENSER DYNAMIC SET POINT

Condenser temperature/pressure optimization can depend on the external temperature.

The condenser temperature/pressure is modified according to the external temperature. The condensing set point is automatically adjusted according to the external temperature, to get an optimum condensing temperature.



REDUCED SET POINT

An internal 7 day clock can automatically change the adjustment's set point, depending on a particular system's individual requirements, to enter an energy saving cycle during nights and weekends, when less power is required. This energy saving cycle can also be initiated from an external source via a digital input.



SUPERVISION SET

The connection to the modern supervising systems (of Dixell) allows, thanks to the CRO (Compressor Rack Optimization), to manage in the best way the compressor rack set point depending on the devices connected, with the result of having an optimize energy saving on the plant. The system, equipped with the CRO function, analyzes the information from the controller in the application to determine if a controller needs more refrigeration power and the quantity. The set point will be re-calculate in order to satisfy the worse instance and sent from the supervising system to the XC1000D; this will be the working set point (fig. 1). If the supervising system can't manage the XC1000D, is the controller that "decided" to replace the set point (coming from the system) and will then define the set point in the program phase.

The 2 graphs (fig. 2) emphasize that when the CRO algorithm is active, in a real installation, the set point becomes on average higher, and consequently the energy consumption decreases. The dotted line represents the average weekly value.



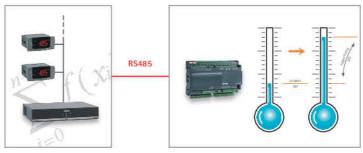
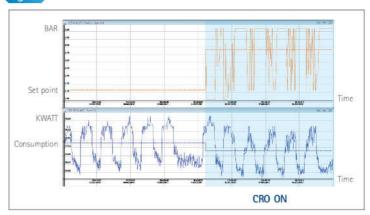


fig. 2



XC1000

Up to 11 COMPRESSOR and FAN COMPRESSOR RACK CONTROLLERS



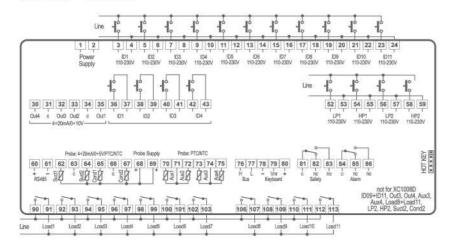
| | ١. | 41 | 2 | DI | N | n | _ f1 |
|---|----|------|---|----|-----|---|------|
| ш | 1 | - 14 | 1 | ш | IN. | к | aп |

XC1008D Digital controller for simultaneous management of up to 8 compressors and fans

XC1011D Digital controller for simultaneous management of up to 11 compressors and fans

| FEATURES | XC1008D | XC1011D |
|---|--|--|
| Display Power supply | LCD on VGC810 24Vac/dc (from TF10D) | LCD on VGC810 24Vac/dc (from TF20D) |
| Probe inputs | | |
| Suction Suction 2 Condensing Condensing 2 Auxiliary Auxiliary 2 Auxiliary 3 Auxiliary 4 | NTC, PTC, 4÷20mA, 0÷5V NTC, PTC, 4÷20mA, 0÷5V NTC, PTC NTC, PTC | NTC, PTC, 4÷20mA, 0÷5V NTC, PTC, 4÷20mA, 0÷5V NTC, PTC, 4÷20mA, 0÷5V NTC, PTC, 4÷20mA, 0÷5V NTC, PTC NTC, PTC NTC, PTC NTC, PTC NTC, PTC |
| Digital inputs | | |
| Low pressure switch Low pressure switch 2 High pressure switch High pressure switch 2 Safety loads Configurable | 1 1 8 4 | 1 1 1 1 1 1 4 |
| Relay outputs | | |
| Loads Alarms | 8 x 7A config 2 x 8A | 11 x 7A config 2 x 8A |
| Other outputs | | |
| Inverter compressors Inverter fans Hot Key/Prog Tool Kit Visokey Serial | 4÷20mA/0÷10V opt 4÷20mA/0÷10V opt pres | 2 x 4÷20mA/0÷10V opt 2 x 4÷20mA/0÷10V opt pres |
| Other | | |
| Remote display Alarms Buzzer | VGC810 last 100 on keyboard | VGC810 last 100 on keyboard |

XC1008D - XC1011D



CONTROLLER and GRAPHIC DISPLAY for COMPRESSOR RACKS with up to 15 COMPRESSORS and FANS

XC1000

XC1015D | Digital controller for simultaneous management of up to 15 compressors and fans

VGC810

Remote keyboard with LCD graphic display and interface dedicated to the management of compressor racks by means of XC1000D controllers (IP65 front protection)



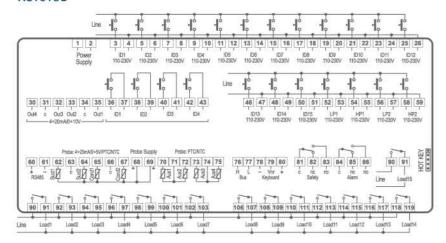


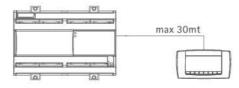
D: 10 DIN Rail

VG: 82x156mm

| FEATURES | XC1015D | VGC810 |
|---|--|--------------------|
| Display | LCD on VGC810 | LCD - 240x96pixels |
| Power supply | 24Vac/dc (from TF20D) | from controller |
| Probe inputs | | |
| Suction Suction 2 Condensing Condensing 2 Auxiliary Auxiliary 2 Auxiliary 3 Auxiliary 4 | NTC, PTC, 4÷20mA, 0÷5V NTC, PTC, 4÷20mA, 0÷5V NTC, PTC, 4÷20mA, 0÷5V NTC, PTC, 4÷20mA, 0÷5V NTC, PTC NTC, PTC NTC, PTC NTC, PTC | |
| Digital inputs | | |
| Low pressure switch Low pressure switch 2 High pressure switch High pressure switch 2 Safety loads Configurable | 1 1 1 1 15 | |
| Relay outputs | | * |
| Loads Alarms | 15 x 7A config 2 x 8A | |
| Other outputs | | |
| Inverter compressors Inverter fans Hot Key/Prog Tool Kit Visokey Serial | 2 x 4÷20mA/0÷10V opt 2 x 4÷20mA/0÷10V opt pres | pres |
| Other | | |
| Remote display Alarms Buzzer | VGC810 last 100 on keyboard | opt |

XC1015D







iProRACK SERIES: up to 2 CIRCUIT and 6 COMPRESSOR per CIRCUIT APPLICATIONS

- · Electronic controllers for compressor racks studied to manage even the most complex installations
- · Management of scroll, semi-hermetic, multi-stages, different capacity and screw compressors
- · Management of 2 circuits with 2 inverters
- Transcritical CO, regulation
- · Special algorithms for energy saving
- · Suction and condensing dynamic set point optimization
- · Sub-cooling management
- Copeland Stream CoreSense[™] diagnostics control module integration
- · Concise information about the variables of the compressor rack through the VISOGRAPH
- Powerful platform with LINUX operating system on CPU ARM9 (200MHz/32bit)
- · Ethernet for the connection to an intranet-internet network
- USB output for configuration update
- RS485 slave serial outputs for the connection to XWEB supervising and controlling systems
- Type of refrigerants: R22, R134A, R404A, R507, R717, R407, R407C, R407F

HOW to ORDER

| IPR208D | 1 | P | R | 2 | 0 | 8 | D | <u>;</u> → 3/ | 1 | 0 | c | 2 | 0 |
|---------|---|---|---|---|---|---|---|---------------|---|---|---|---|---|
| IPR215D | I | P | R | 2 | 1 | 5 | D | = | 1 | 0 | С | 0 | 0 |

C

Ethernet, protocols

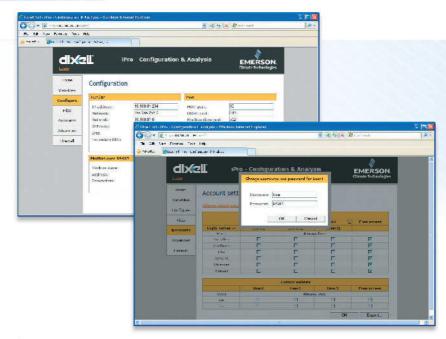
0 = No

1 = Yes

| VGIPG | V G I P G - A | B 0 D 0 |
|---------------|------------------|-------------|
| Α | В | D |
| Buzzer | Kind of mounting | Coding |
| 0 = No | P = Panel | 0 = Ascii |
| 1 = Yes | W = Wall | 1 = Unicode |

INTERNAL WEB SERVER

The iProRACK controllers have an integrated web site that can be easily reached through a standard browser. This instrument is very useful to configure the controller and to display and change the machine variables.

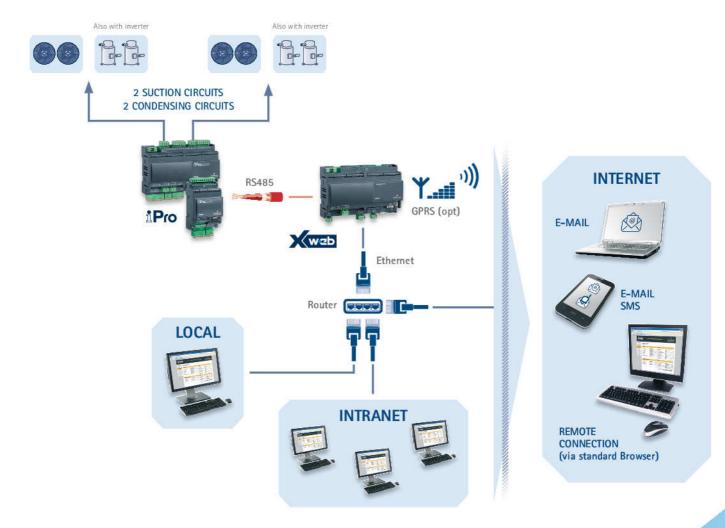


MAIN FEATURES

- CPU: 200MHz
- · Processor: 32bit
- . RAM memory: 32MB (4 DIN Rail), 64MB (10 DIN Rail)
- Data storage on Flash memory: 32MB (4 DIN Rail), 128MB (10 DIN Rail)
- Power absorption: 40VA max (4 DIN Rail), 20VA max (10 DIN Rail)

CONNECTIVITY

The powerful platform that marks the iProRACK controllers and allows the compressor rack to be easily and quickly reached both locally and remotely. In addition to the connection via Ethernet, there is also one via RS485 that allows the connection to XWEB systems, ensuring complete plant monitoring and controlling.



iProRACK

CONTROLLER and GRAPHIC DISPLAY for COMPRESSOR RACKS with up to 2 CIRCUITS and 6 COMPRESSORS per CIRCUIT



D: 10 DIN Rail





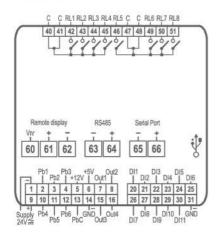
D: 4 DIN Rail VG: 82x156mm

| IPR208D | Digital controller in 4 DIN Rail format with bayonet + screw connectors for compressor rack management |
|---------|---|
| IPR215D | Digital controller in 10 DIN Rail format with bayonet + screw connectors for compressor rack management |
| VGIPG | Remote keyboard with LCD graphic display and interface dedicated to the management of |

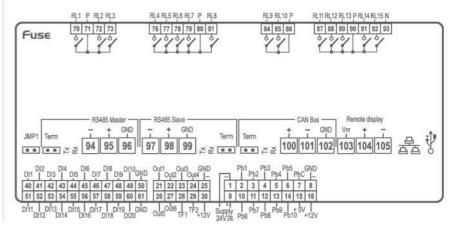
compressor racks by means of iProRACK controllers (IP65 front protection)

| FEATURES | IPR208D | IPR215D | VGIPG |
|--|---------------------|---------------------|--------------------|
| Display | LCD on VGIPG | LCD on VGIPG | LCD - 240x96pixels |
| Power supply | 24Vac/dc from TF40D | 24Vac/dc from TF20D | from controller |
| Probe inputs | | | |
| 0÷1V, 0÷5V, 0÷10V, 0÷20mA, 4÷20mA, NTC, PTC, DI | 6 x config | 10 x config | |
| Digital inputs | | | |
| Opto-insulated | 11 x config | 20 x config | |
| Relay outputs | | | |
| Configurable | 8 x 5A | 15 x 5A | |
| Other outputs | | | |
| 0÷10V/4÷20mA | 4 x config | 2 x config | |
| 0÷10V | | 4 | |
| RS485 | master + slave | master + slave | |
| USB | pres | pres | |
| CANBus | | pres | |
| Ethernet | via USB-ETH-CONV | opt | |
| Visokey | | | pres |
| Other | | | |
| Remote display | 1 x VGIPG | 2 x VGIPG | |
| Real time clock | pres | pres | |
| Flash memory | 32MB | 128MB | |
| Connections | bayonet + screw | bayonet + screw | |
| Connection kit | IP-FC208 | IP-FC215CP | |
| BACnet protocol | opt | opt | |
| Buzzer | 27. | | opt |

IPR208D



IPR215D





FAN SPEED CONTROLLERS

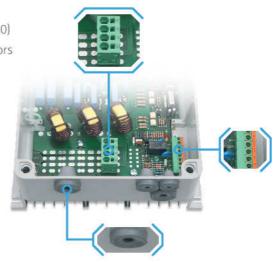
SECTION INDEX

FUNCTIONS MODELS XV300 - three-phase fan speed control 94 Three-phase speed controllers XV308K - XV310K - XV312K XV320K - XV328K - XV340K 95 XV05/10/22/100 - single-phase fan speed control 96 Single-phase speed controllers XV05PD - XV05PK - XV10PK XV22PK - XV105D - XV110K XV150K 97 XV-ACK Accessory 98



XV300 SERIES: THREE-PHASE FAN SPEED CONTROL

- Chopped phase regulators designed for 3-phase fans with adjustable voltage motors
- Designed for adjustable voltage motors from 8 to 40A
- · Oversized heat sinks for better heat disposal
- · Integrated heat protection
- · Oversized power stages
- · Optimized radiofrequency filters
- Available with ABS self-extinguishing cover (IP55) or in aluminum (IP20)
- Less time spent for wiring operations thanks to the screwless connectors with useful cable protectors
- On board 0÷10V output to be used for testing operation
- Compatible with Dixell controllers equipped with PWM, 4÷20mA, 0÷10V outputs like the iPro, XC600, XM600, ... series



HOW to ORDER

XV308/312/328/340K

XV310K

XV320K

| X | ٧ | 3 | | | K | (=) | 7 | 0 | 1 | 0 | 0 |
|---|---|---|---|---|---|------------|---|---|---|---|---|
| X | ٧ | 3 | 1 | 0 | K | - | 7 | 0 | 0 | 0 | 0 |
| X | ٧ | 3 | 2 | 0 | K | - | 7 | 0 | C | 0 | 0 |



Protection grade

0 = IP20

1 = 1P55

XV300

THREE-PHASE SPEED CONTROLLERS

| XV308K | Speed controller designed for three-phase A.C. motors up to 5,5kVA, 8A, with input for PWM, $4\div20mA$ or $0\div10V$, dimension $165x230mm$, weight $2,5Kg$, power dissipation $30W$ |
|--------|--|
| XV310K | Speed controller designed for three-phase A.C. motors up to 6,5VA, 10A, with input for PWM, 4÷20mA or 0÷10V, dimension 165x230mm, weight 3Kg, power dissipation 40W |
| XV312K | Speed controller designed for three-phase A.C. motors up to 8kVA, 12A, with input for PWM, 4÷20mA or 0÷10V, dimension 230x265mm, weight 4Kg, power dissipation 60W |
| XV320K | Speed controller designed for three-phase A.C. motors up to 13kVA, 20A, with input for PWM, 4÷20mA or 0÷10V, dimension 230x265mm, weight 4,8Kg, power dissipation 80W |
| XV328K | Speed controller designed for three-phase A.C. motors up to 19kVA, 28A, with input for PWM, 4÷20mA or 0÷10V, dimension 270x340mm, weight 7Kg, power dissipation 120W |
| XV340K | Speed controller designed for three-phase A.C. motors up to 26kVA, 40A, with input PWM, 4÷20mA or 0÷10V, dimension 270x340mm, weight 9Kg, power dissipation 155W |





K: 165x230mm

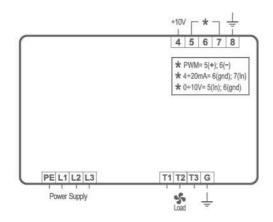
K: 230x265mm



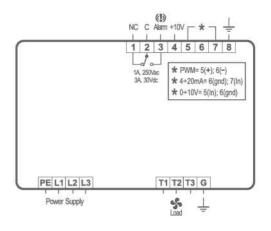
K: 270x340mm

| FEATURES | XV308K | XV310K | XV312K | XV320K | XV328K | XV340K |
|------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Power supply | 400Vac | 400Vac | 400Vac | 400Vac | 400Vac | 400Vac |
| Protection grade | IP55 | IP20 | IP55 | IP55, IP20 | IP55 | IP55 |
| Maximum load | 8A | 10A | 12A | 20A | 28A | 40A |
| Control input | PWM 4÷20mA 0÷10V | PWM 4÷20mA 0÷10V | PWM 4÷20mA 0÷10V | PWM 4÷20mA 0÷10V | PWM 4÷20mA 0÷10V | PWM 4÷20mA 0÷10V |
| Alarm relay | | | 1A, 250Vac 3A, 30Vdc | 1A, 250Vac 3A, 30Vdc | 1A, 250Vac 3A, 30Vdc | 1A, 250Vac 3A, 30Vdc |
| Auxiliary output | 10Vdc | 10Vdc | 10Vdc | 10Vdc | 10Vdc | 10Vdc |
| Supply LED | pres | pres | pres | pres | pres | pres |
| Alarm LED | pres | pres | pres | pres | pres | pres |
| Relay ON LED | | 04-0000 | pres | pres | pres | pres |

XV308K - XV310K



XV312K - XV320K - XV328K - XV340K





XV05/10/22/100 SERIES: SINGLE-PHASE FAN SPEED CONTROL

- Chopped phase speed controllers to control pressure and temperature in refrigerating systems including cooling fans
- · Inputs for regulation by temperature and pressure
- · Direct or inverse action for condenser or evaporator fans
- · Cut off, minimum speed and max speed at start up functions
- · Trigger output for managing another module
- Slave models managed by the input signal (for XV100)
- Compatible with Dixell controllers equipped with PWM, 4÷20mA, 0÷1V/0÷10V outputs like the iPro, XC600, XM600, ... series
- 1VA max power absorption
- Measurement range: 0÷100%

| HOW to ORDER | | | | | | | | | | | | | |
|--------------------|---|---|------|--------|-------|-------|-------|--------|------|------|---|---|---------------------|
| XV05PD | X | V | 0 | 5 | Р | D | - | 5 | 0 | 0 | 0 | 0 | |
| XV05/10/22PK | X | ٧ | | | P | K | - | 5 | 0 | 0 | 0 | 0 | |
| XV100 | X | V | 1 | | | | - | 5 | В | С | D | 0 | |
| В | | | | | | | | С | | | | | D |
| Format | | T | ype | of ac | tion | | - 44 | :18 | | | | | Regulation input |
| O = DIN | | D | = D | irect | + Cu | t Off | | | | | | | N = NTC probe |
| 5 = Enclosure IP55 | | R | = Ir | verse | + C | at Of | F | | | | | | A = Current (4÷20m/ |
| | | N | = S | lave (| not f | or re | gulat | ion in | nput | = N) | | | V = 0÷1V/0÷10V |

SINGLE-PHASE SPEED CONTROLLERS

XV05/10/22

XV05PD XV05PK Speed controllers designed for single-phase A.C. motors up to 500W, 2A, PWM input

XV10PK Speed controller designed for single-phase A.C. motors up to 1000W, 4A, PWM input

XV22PK Speed controller designed for single-phase A.C. motors up to 2200W, 9,5A, PWM input

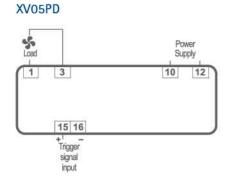


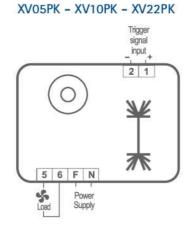


PD: 4 DIN Rail

PK: 80x70mm

| FEATURES | XV05PD | XV05PK | XV10PK | XV22PK |
|------------------------------|--------|--------|--------|--------|
| Power supply | 230Vac | 230Vac | 230Vac | 230Vac |
| Control input | PWM | PWM | PWM | PWM |
| Direct-inverse function | | | | |
| Full speed input at start up | | | | |
| Trigger signal | pres | pres | pres | pres |
| Minimum speed function | 100 | X-60 | 105 | 407 |
| Cut off function | | | | |





XV100

SINGLE-PHASE SPEED ADVANCED CONTROLLERS





D: 4 DIN Rail K: 139x158mm

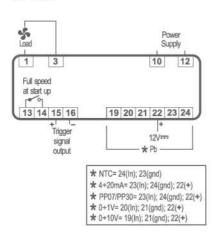


K: 175x200mm

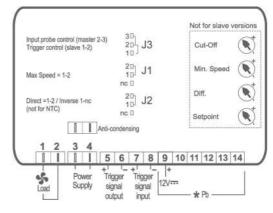
| XV105D | Speed controller designed for single-phase A.C. motors up to 500W, with input for NTC, 4 \pm 20mA, 0 \pm 1V or 0 \pm 10V |
|--------|---|
| XV110K | Speed controller designed for single-phase A.C. motors up to 1kW, with input for NTC, $4 \div 20mA$, $0 \div 1V$ or $0 \div 10V$ |
| XV150K | Speed controller designed for single-phase A.C. motors up to 5kW, with input for NTC, $4\div20mA$, $0\div1V$ or $0\div10V$ |

| FEATURES | XV105D | XV110K | XV150K |
|------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Power supply | 230Vac | 230Vac | 230Vac |
| Control input | NTC 4÷20mA 0÷1V/0÷10V | NTC 4÷20mA 0÷1V/0÷10V | NTC 4÷20mA 0÷1V/0÷10V |
| Direct-inverse function | pres | pres | pres |
| Full speed input at start up | pres | pres | pres |
| Trigger signal | pres | pres | pres |
| Minimum speed function | pres | pres | pres |
| Cut off function | pres | pres | pres |

XV105D



XV110K - XV150K



* NTC= 11(In); 10(gnd) * 4+20mA= 10(ln); 11(gnd); 9(+) * PP07/PP30= 10(In); 11(gnd); 9(+) * 0+1V= 13(In); 14(gnd); 9(+) * 0+10V= 12(In); 14(gnd); 9(+)

ACCESSORY

XV-ACK

Anti-condensing kit for XV110K and XV150K models

- Resistance at 25°C (77°F): 100÷6000hm
- · Rated operating voltage: 120Vac or 220Vac
- Max operating voltage: 260Vac
- Steady state current at 25°C (77°F): 12A±30% (120Vac) 9A±30% (220Vac)







SECTION INDEX

FUNCTIONS MODELS

| XT100 - NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0 | (T100 – NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V multi-probe input | |
|---|---|-----|
| 1 stage digital controllers | XT110C - XT110D XT111C - XT111D | 101 |
| 2 stage digital controllers | XT120C - XT120D XT121C - XT121D | 102 |
| Neutral zone digital controllers | XT130C - XT130D XT131C - XT131D | 103 |
| 2 stage digital controllers (1 PID) | XT141C - XT141D | 104 |
| 3 stage digital controller | XT151D | 104 |
| 4 stage digital controller | XT160D | 104 |



XT100 SERIES: NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V MULTI-PROBE INPUT

- Universal controllers to manage temperature, humidity and pressure in both the industrial and commercial applications
- Stock optimization: thanks to the multi-probe inputs
- 1 or 2 stage ON/OFF or PID with direct or reverse action
- Temperature inputs: PTC, NTC, Pt100; thermocouple J, K or S by selecting the parameters
- Pressure or humidity inputs: 4÷20mA, 0÷1V or 0÷10V by selecting the parameters
- Direct line power supply 230 (110) Vac. No external transformer required
- Display with integrated measurement unit (°C/°F/%RH/Bar/PSI)
- · Hot Key or Prog Tool Kit connector for quick and easy programming
- · Serial connection to monitoring systems
- 3VA max power absorption
- · Display with red LED (10,5 mm high) and 5 icons

HOW to ORDER A B C D U XT100 For blue display please contact Dixell A В C Power supply Measurement unit Buzzer Analog output Input C = °C P = PTC (NTC) 0 = 12 Vac/dc0 = No No $F = {}^{\circ}F$ T = PTC (NTC, Pt100, TcJ,TcK, TcS) 1 = 24Vac/dc 1 = Yes No B = Bar2 = 24Vac 2" = No 4÷20mA A = 4÷20mA, 0÷1V, 0÷10V P = PSIB = PP07 (-0.5÷7bar) 4 = 110Vac 3* = Yes 4÷20mA 5 = 230Vac H = %RH4* = No 0÷10V C = PP30 (0÷30bar) N = No measurement unit 5" = Yes 0÷10V D = PP11 (-0.5÷11bar) *Only for D format H = XH10/20P

1 STAGE CONTROLLERS

XT110C XT110D

ON/OFF configurable digital 1 stage controllers

XT111C XT111D

ON/OFF configurable digital 1 stage controllers with alarm relay





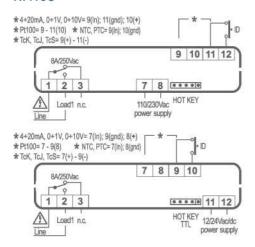
C: 32x74mm

D: 4 DIN Rail

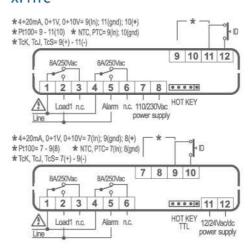
| FEATURES | XT110C | XT110D | XT111C | XT111D |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Display: n° digits | ± 31/2 d.p. | ± 3½ d.p. | ± 3½ d.p. | ± 3½ d.p. |
| Power supply | 12, 24Vac/dc 110, 230Vac | 24Vac/dc 24, 110, 230Vac | 12, 24Vac/dc 110, 230Vac | 24Vac/dc 24, 110, 230Vac |
| Probe inputs | | | | |
| NTC, PTC, Pt100, TcJ, TcK, TcS, $4 \div 20$ mA, $0 \div 1$ V, $0 \div 1$ OV | config | config | config | config |
| Relay outputs | | | | |
| Stage 1 | 8A | no 8A/nc 5A | 8A | no 8A/nc 5A |
| Stage 2 | | | | |
| Stage 3 | | | | |
| Stage 4 Alarm | | | 8A | no 8A/nc 5A |
| Other | | | OA. | 110 ONTIC DA |
| Digital input | pres | pres | pres | pres |
| Hot Key/Prog Tool Kit output | pres* | pres | pres* | pres |
| Serial output | TTL* | TTL | TTL* | TTL |
| Analog output | | 4÷20mA, 0÷10V | | 4÷20mA, 0÷10V |
| Buzzer | opt | opt | opt | opt |

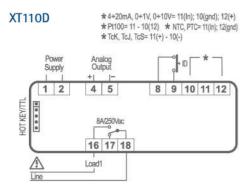
^{*} Prog Tool Kit output and serial output only for models with 12/24Vac/dc probe supply

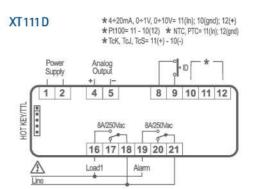
XT110C



XT111C







2 STAGE CONTROLLERS





XT120C XT120D

ON/OFF configurable digital 2 stage controllers

XT121C XT121D

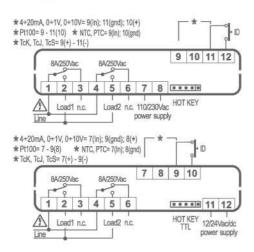
ON/OFF configurable digital 2 stage controllers with alarm relay

C: 32x74mm D: 4 DIN Rail

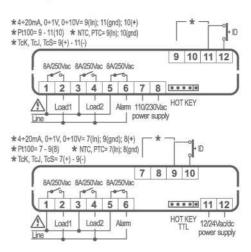
| FEATURES | XT120C | XT120D | XT121C | XT121D |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Display: n° digits | ± 31/2 d.p. | ± 3½ d.p. | ± 3½ d.p. | ± 3½ d.p. |
| Power supply | 12, 24Vac/dc 110, 230Vac | 24Vac/dc 24, 110, 230Vac | 12, 24Vac/dc 110, 230Vac | 24Vac/dc 24, 110, 230Vac |
| Probe inputs | | | | |
| NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V | config | config | config | config |
| Relay outputs | | | | |
| Stage 1 | 8A | no 8A/nc 5A | 8A | no 8A/nc 5A |
| Stage 2 | 8A | no 8A/nc 5A | 8A | no 8A/nc 5A |
| Stage 3 | | | | |
| Stage 4 | | | | |
| Alarm | | | 8A | no 8A/nc 5A |
| Other | | | | |
| Digital input | pres | pres | pres | pres |
| Hot Key/Prog Tool Kit output | pres* | pres | pres* | pres |
| Serial output | TTL* | TTL | TTL* | TTL |
| Analog output | | 4÷20mA, 0÷10V | | 4÷20mA, 0÷10V |
| Buzzer | opt | opt | opt | opt |

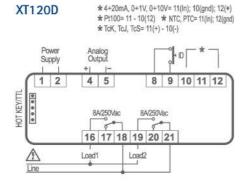
^{*} Prog Tool Kit output and serial output only for models with 12/24Vac/dc probe supply

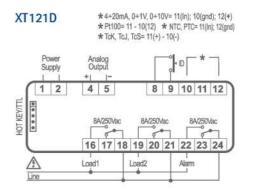
XT120C



XT121C







NEUTRAL ZONE CONTROLLERS

XT130C XT130D

ON/OFF configurable digital neutral zone controllers

XT131C XT131D

ON/OFF configurable digital neutral zone controllers with alarm relay





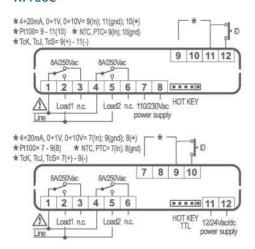
C: 32x74mm

D: 4 DIN Rail

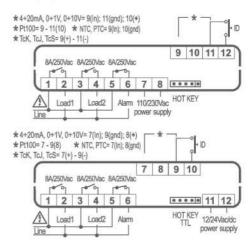
| FEATURES | XT130C | XT130D | XT131C | XT131D |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Display: n° digits | ± 31/2 d.p. | ± 3½ d.p. | ± 31/2 d.p. | ± 3½ d.p. |
| Power supply | 12, 24Vac/dc 110, 230Vac | 24Vac/dc 24, 110, 230Vac | 12, 24Vac/dc 110, 230Vac | 24Vac/dc 24, 110, 230Vac |
| Probe inputs | | | | |
| NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V | config | config | config | config |
| Relay outputs | | | | |
| Stage 1 | 8A | no 8A√nc 5A | 8A | no 8A/nc 5A |
| Stage 2 | 8A | no 8A/nc 5A | 8A | no 8A/nc 5A |
| Stage 3 | | | | |
| Stage 4 | | | | |
| Alarm | | | 8A | no 8A/nc 5A |
| Other | | | | |
| Digital input | pres | pres | pres | pres |
| Hot Key/Prog Tool Kit output | pres* | pres | pres* | pres |
| Serial output | TTL* | TTL | TTL* | TTL |
| Analog output | | 4÷20mA, 0÷10V | | 4÷20mA, 0÷10V |
| Buzzer | opt | opt | opt | opt |

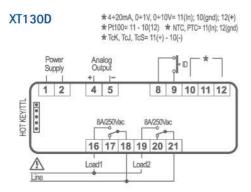
^{*} Prog Tool Kit output and serial output only for models with 12/24Vac/de probe supply

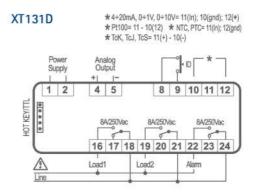
XT130C



XT131C







2 (1 PID), 3 and 4 STAGE CONTROLLERS





ON/OFF configurable digital 3 stage controllers with alarm relay

XT160D ON/OFF configurable digital 4 stage controllers

C: 32x74mm D: 4 DIN Rail

| FEATURES | XT141C | XT141D | XT151D | XT160D |
|---|-----------------------------|-----------------------------|--|-----------------------------|
| Display: n° digits | ± 31/2 d.p. | ± 3½ d.p. | ± 3½ d.p. | ± 31/2 d.p. |
| Power supply | 12, 24Vac/dc 110, 230Vac | 24Vac/dc 24, 110, 230Vac | 24Vac/dc 24, 110, 230Vac | 24Vac/dc 24, 110, 230Vac |
| Probe inputs | | | | |
| NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V | config | config | config | config |
| Relay outputs | | | | |
| Stage 1 | 8A | no 8A/nc 5A | no 8A/nc 5A | no 8A/nc 5A |
| Stage 2 | 8A | no 8A/nc 5A | no 8A/nc 5A | no 8A/nc 5A |
| Stage 3 | | | no 8A/nc 5A | no 8A/nc 5A |
| Stage 4 | | | The second second market a responsible | 8A |
| Alarm | 8A | no 8A/nc 5A | 8A | |
| Other | | | | |
| Digital input | pres | pres | pres | pres |
| Hot Key/Prog Tool Kit output | pres* | pres | pres | pres |

TTL

opt

TTL*

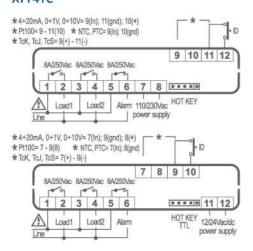
opt

XT151D

XT141C

Serial output

Analog output Buzzer





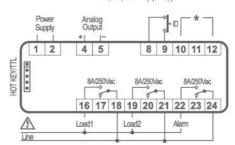
4÷20mA, 0÷10V

* 4+20mA, 0+1V, 0+10V=11(In); 10(gnd); 12(+) * Pt100=11 - 10(12) * NTC, PTC=11(In); 12(gnd) * TcK, TcJ, TcS=11(+) - 10(-)

TTL

opt

4:20mA, 0:10V



TTL

opt

4÷20mA, 0÷10V

XT1 51D

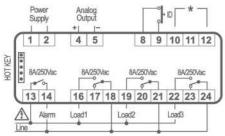
*4+20mA, 0+1V, 0+10V= 11(In); 10(gnd); 12(+)

*Pt100= 11 - 10(12) * NTC, PTC= 11(In); 12(gnd)

*TcK, TcJ, TcS= 11(+) - 10(-)

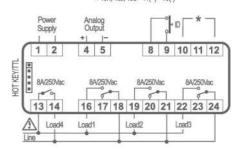
Power

Analog



XT160D

*4+20mA, 0+1V, 0+10V=11(In); 10(gnd); 12(+)
*Pt100=11 - 10(12) * NTC, PTC=11(In); 12(gnd)
*TcK, TcJ, TcS=11(+) - 10(-)



^{*} Prog Tool Kit output and serial output only for models with 12/24Vac/dc probe supply



SECTION INDEX

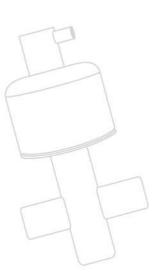
FUNCTIONS MODELS

| X | XEV20 - stepper electronic expansion valve management | | 106 |
|----|--|--|------|
| | Driver for EEV management compatible with iPro controllers | XEV20D | 107 |
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| | Development tool | iPro-TOOL | 111 |
| | Programmable controllers with disconnectable connectors | IPG108D - IPG108E - IPG115D | 112 |
| | Programmable controllers with bayonet connectors | IPG208D – IPG208E IPG215D – IPG215F | 113 |
| | Expansion modules with disconnectable connectors | IPX106D - IPX115D IPX125D - IPX306D | 11 4 |
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| | Connectivity module | IPL500D | 115 |
| | LCD graphic display | VGIPG | 116 |
| | Accessory | VISOKEY | 116 |



XEV20: STEPPER ELECTRONIC EXPANSION VALVE MANAGEMENT

- Driver for iPro controllers for the stepper electronic expansion valve management
- · Optimization of superheat regulation inside the unit
- Increased energy savings
- · Single or dual circuit
- · Support for motorized valves unipolar/bipolar
- Temperature analog inputs (NTC, PTC, Pt1000)
- Pressure analog inputs (0÷5V, 4÷20mA)
- 4-position DIP Switch to set the address
- · LAN output for the connection to iPro series controllers in 4 DIN format
- CANBus output for the connection to iPro series controllers in 10 DIN format
- Type of refrigerant gas: R22, R134A, R404A, R407, R410, R507



HOW to ORDER



1 = 2 valves

DRIVER for EEV MANAGEMENT COMPATIBLE with iPro CONTROLLERS

XEV20

XEV20D

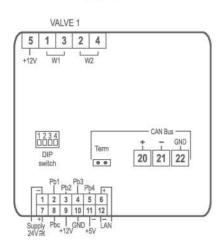
Driver for 1 or 2 unipolar and bipolar stepper electronic expansion valves to use with iPro programmable controllers



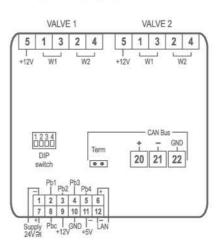
D: 4 DIN Rail

| FEATURES | XEV20D | |
|----------------------------------|--|--|
| Power supply | 24Vac/dc (from TF20D for 1 valve or from TF40D for 2 valves) | |
| Probe inputs | | |
| N°4 (Pb 1, Pb2, Pb3, Pb4) | 0÷5V/4÷20mA/NTC/PTC/Pt1000 config | |
| Other | | |
| LAN output | pres | |
| CANBus output | pres | |
| DIP switch for address selection | pres | |
| Connection kit | DWXEV30 | |

XEV20D - 1 circuit



XEV20D - 2 circuits

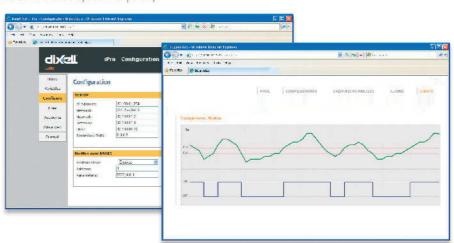




iProgenius series: general applications high connectivity

iProGENIUS is the Dixell family of programmable controllers that offers optimal solutions for all HVAC/R needs. They are suited for all applications in the PLC world including shopping centers, hospitals, airports, boatyards, energy management plants, and more. These controllers provide a high level of technology for ease of external connectivity and programmability providing simple answers for the user's needs, while offering local or remote monitoring control (accomplished with the powerful **iProLINK** connectivity module). An intuitive and useful HMI is also offered through the **VISOGRAPH** graphic display and the touch screen **TGIPG** display, while the expandability provided by the **IPX** modules allows use of these controllers with the most complex machinery.

- Powerful platform based on LINUX operative system on ARM9 (200MHz/32bit) microprocessor
- Internal Web Server with standard and customized Web Site
- Ethernet for connection to an intranet-internet network and to other controllers for a distributed application management
- USB output that allows the download of parameters, data/alarm log and the applications and parameters upload
- RS485 serial outputs for the connection to XWEB supervising and controlling systems or to applications developed by third Party Systems
- BACnet® communications allows the system to have easy and immediate integration with different manufactures ensuring complete interoperability
- · Connection to the expansion modules to increase system capacity
- Connection to the driver for the management and control of electronic expansion valves



MAIN FEATURES

- CPU: 200MHz
- Processor 32bit
- RAM memory: 32MB (4 DIN Rail) 64MB (10 DIN Rail)
- · Data storing on Flash memory: 32MB (4 DIN Rail)

128MB (10 DIN Rail, IPL500D)

• Power absorption: 40VA max (IPG on 4 DIN Rail)

20VA max (IPG and IPX on 10 DIN Rail, IPL500D)

10VA max (IPX on 4 DIN Rail)

HOW to ORDER

IPRO-TOOL I P R O - T O O L - O O O E

E

Visoprog

0 = No

1 = 2 licences

IPG108D/F - IPG208D/F

| J | P | G | 0 | 8 | = | 1 | 0 | С | D | 0 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | P | G | 1 | 5 | = | Α | В | С | 0 | 0 |

| 1PG 108D/E - 1PG208D/E | 1. | P | G | 0 | 8 | _ = | 100 | U | C | ט | 0 |
|------------------------|----|---|---|---|---|-----|-----|---|---|---|---|
| IPG115D - IPG215D/F | 1 | P | G | 1 | 5 | - | Α | В | C | 0 | 0 |
| | | | | | | | | | | | 1 |

| Α | В | С | D |
|------------------------|--|--|------------------|
| Power supply | Modem | Ethernet, protocols | Serial port |
| 1 = 24Vac/dc | 0 = No | 0 = No | 1 = LAN |
| UL versions | 1 = Internal modem (not for UL) | 1 = Yes (for IPG115D, IPG215D and IPG215F) | 2 = RS485 master |
| 2 = 24Vac | 2 = External modem | 2 = BACnet | |
| 3 = 24Vdc (for IPG215) | 3 = External + internal modem (not for UL) | | |

IPX106D

IPX206D - IPX306D

IPX115D - IPX215D

IPX125D - IPX225D

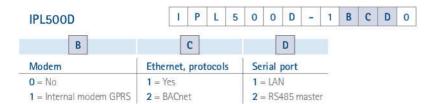
| li | Р | X | 1 | 0 | 6 | D | - | 3 | 0 | 0 | 0 | 0 |
|----|---|---|---|---|---|---|-----|---|---|---|---|---|
| ĺ | P | X | | 0 | 6 | D | - | 1 | 0 | 0 | 0 | E |
| E | P | Х | | 1 | 5 | D | - | 3 | 0 | 0 | 0 | 0 |
| 1. | P | X | | 2 | 5 | D | 343 | 1 | 0 | 0 | 0 | 2 |

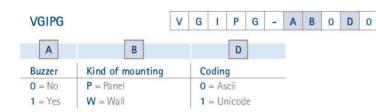
Е

N° of SSR relay

0 = 0

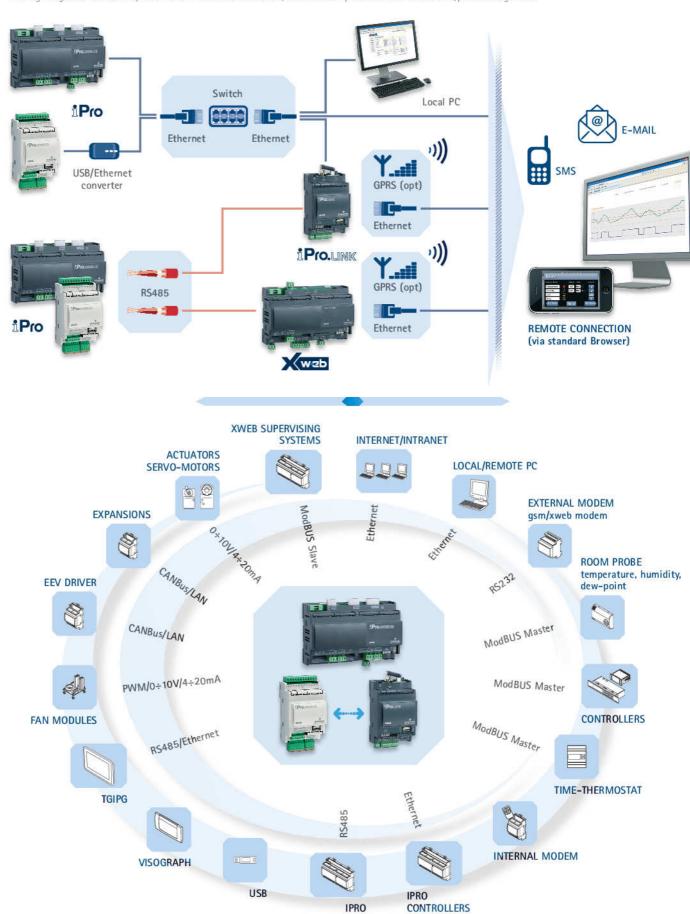
2 = 1





CONNECTIVITY

The high degree of connectivity that marks iProGENIUS controllers, ensures a complete local and remote unit/plant management.



IPRO CONTROLLERS

DEVELOPMENT TOOL

1 ISaGRAF® + WIZMATE + VISOPROG

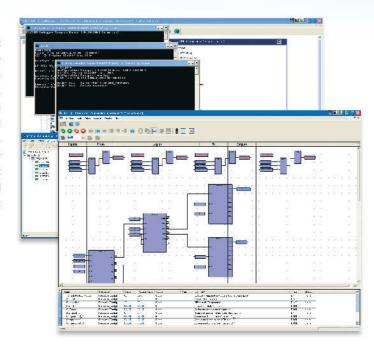
iPro-TOOL is a complete and easy to use tool that allows the user to work independently to create programs for iPro controllers, taking advantage of all the programmable series potential. The package includes manuals and the **ISaGRAF®**, **WIZMATE** and **VISOPROG** (optional) software.

The user can choose among 2 options listed above.

Note: Wizmate can be used with iProRACK applications.

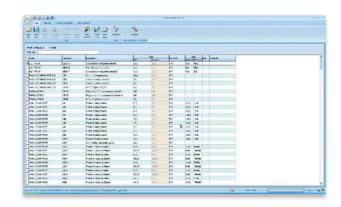
■ ISaGRAF®

ISaGRAF® is the standard, international and complete development environment selected by Dixell to create programs that will be uploaded into the iPro series. Also ideal for small applications, it can manage several I/O points, allows users to create control systems, and is supported all over the world. ISaGRAF® offers a combination of a highly portable, robust management engines (Virtual Machine) and an intuitive application development environment (Workbench). ISaGRAF® integrates the best system for simulation and remote debugging, supports the Flow Chart (FC: Flow Chart) and 5 different programming languages coded according to IEC61131 (SFC: Sequencial Function Chart; ST: Structured Text; FBD: Function Block Diagram; IL: Instruction List; LD: Ladder Diagram).



WIZMATE

WIZMATE is versatile software that has a fast and easy programming mode for iPro controllers (ideal for versions with the application included like the iProRACK).



VISOPROG

The VISOPROG is a tool that allows users to create the VISOGRAPH keyboard graphic interfaces. The program, installed on a PC, is connected to ISaGRAP® project and has a basic interface that users can easily customize depending on the requirements.



iProGENIUS

PROGRAMMABLE CONTROLLERS with DISCONNECTABLE CONNECTORS



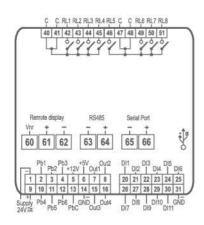


D, E: 4 DIN Rail D: 10 DIN Rail

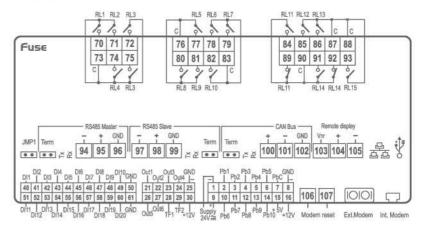
| IPG108D | Programmable controller in 4 DIN Rail format with disconnectable + screw connectors |
|---------|---|
| IPG108E | Programmable controller in 4 DIN Rail format with LED display and disconnectable + screw connectors |
| IPG115D | Programmable controller in 10 DIN Rail format with disconnectable connectors |

| FEATURES | IPG108D | IPG108E | IPG115D |
|--|---------------------------|---------------------------|---------------------------|
| Display Front led | | dual with icons | |
| Power supply | 24Vac/dc from TF40D | 24Vac/dc from TF40D | 24Vac/dc from TF20D |
| Probe inputs | | | |
| 0÷1V, 0÷5V, 0÷10V, 0÷20mA, 4÷20mA, NTC, PTC, DI | 6 x config | 6 x config | 10 x config |
| Digital inputs | | | |
| Optoinsulated | 11 x config | 11 x config | 20 x config |
| Relay outputs | | | |
| Configurable | 8 x 5A | 8 x 5A | 12 x 5A + 3 x 8A |
| Other outputs | | | |
| PWM 0÷10V/4÷20mA 0÷10V | 4 x config | 4 x config | 2 x config |
| RS485 | slave | slave | master + slave |
| USB External modem | pres | pres | pres GSM, analogue |
| LAN/RS485 master CANBus | pres | pres | pres |
| Ethernet | via USB-ETH-CONV | via USB-ETH-CONV | opt |
| Other | | | |
| Remote keyboard Internal modem | 1 x VGIPG | 1 x GIPG | 2 x VGIPG analogue opt |
| Real time clock | pres | pres | pres |
| Flash memory | 32MB | 32MB | 128MB |
| Connections | disconnectable + screw | disconnectable + screw | disconnectable |
| Connection kit | DWS30-KIT, IP-FC108 | DWS30-KIT, IP-FC108 | DWB30-KIT |
| Expansion modules | IPX115D, IPX125D, IPX306D | IPX115D, IPX125D, IPX306D | IPX106D, IPX115D, IPX125D |
| BACnet protocol | opt | opt | opt |

IPG108D - IPG108E



IPG115D



PROGRAMMABLE CONTROLLERS with BAYONET CONNECTORS

iProGENIUS

| IPG208D | Programmable controller in 4 DIN Rail format with bayonet + screw connectors, ideal for the civil field |
|---------|---|
| IPG208E | Programmable controller in 4 DIN Rail format with LED display and bayonet + screw connectors, ideal for the civil field |
| IPG215D | Programmable controller in 10 DIN Rail format with bayonet + screw connectors, ideal for the civil field |
| IPG215F | Programmable controller in 10 DIN Rail format with front LED and bayonet + screw connectors, ideal for the civil field |



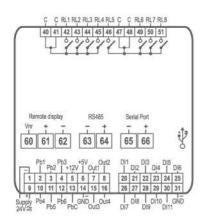


D, E: 4 DIN Rail

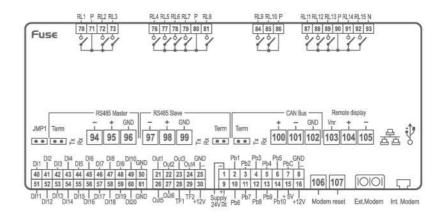
D, F: 10 DIN Rail

| FEATURES | IPG208D | IPG208E | IPG215D | IPG215F |
|--|---------------------------|---------------------------|---------------------------|-------------------------|
| Display | | dual with icons | | |
| Front led | 200 | 50 | 30 | n° 5 |
| Power supply | 24Vac/dc from TF40D | 24Vac/dc from TF40D | 24Vac/dc from TF20D | 24Vac/dc from TF20D |
| Probe inputs | | | | |
| 0÷1V, 0÷5V, 0÷10V, 0÷20mA, 4÷20mA, NTC, PTC, DI | 6 x config | 6 x config | 10 x config | 10 x config |
| Digital inputs | | | | |
| Optoinsulated | 11 x config | 11 x config | 20 x config | 20 x config |
| Relay outputs | | | | |
| Configurable | 8 x 5A | 8 x 5A | 15 x 5A | 15 x 5A |
| Other outputs | | | | |
| PWM | | | | |
| 0÷10V/4÷20mA | 4 x config | 4 x config | 2 x config | 2 x config |
| 0÷10V | | | 4 | 4 |
| RS485 | slave | slave | master + slave | master + slave |
| USB | pres | pres | pres | pres |
| External modem | | | GSM, analogue | GSM, analogue |
| LAN/RS485 master | pres | pres | CTZ II MILITA I MARKO | |
| CANBus | SAL SAN | | pres | pres |
| Ethernet | via USB-ETH-CONV | via USB-ETH-CONV | opt | opt |
| Other | | | | |
| Remote keyboard | 1 x VGIPG | 1 x VGIPG | 2 x VGIPG | 2 x VGIPG |
| Internal modem | | | analogue opt | analogue opt |
| Real time clock | pres | pres | pres | pres |
| Flash memory | 32MB | 32MB | 128MB | 128MB |
| Connections | bayonet + screw | bayonet + screw | bayonet + screw | bayonet + screw |
| Connection kit | IP-FC208 | IP-FC208 | IP-FC215CP | IP-FC215CP |
| Expansion modules | IPX206D, IPX215D, IPX225D | IPX206D, IPX215D, IPX225D | IPX206D, IPX215D, IPX225D | IPX206D, IPX215D, IPX22 |
| BACnet protocol | opt | opt | opt | opt |

IPG208D - IPG208E



IPG215D - IPG215F



IPX

EXPANSION MODULES with DISCONNECTABLE and BAYONET CONNECTORS







D: 4 DIN Rail D: 4 DIN Rail D: 4 DIN Rail



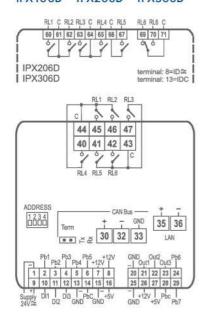


D: 10 DIN Rail D: 10 DIN Rail

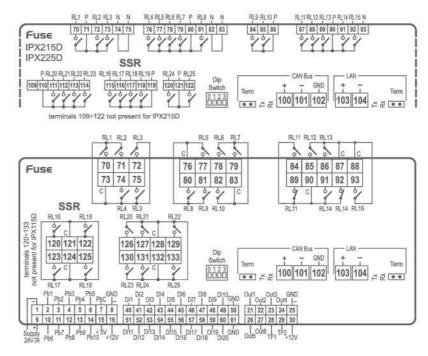
| IPX106D | Expansion module in 4 DIN Rail format with disconnectable connectors and 6 relay outputs |
|---------|---|
| IPX115D | Expansion module in 10 DIN Rail format with disconnectable connectors and 15 relay outputs |
| IPX125D | Expansion module in 10 DIN Rail format with disconnectable connectors and 25 relay outputs |
| IPX206D | Expansion module in 4 DIN Rail format with bayonet + screw connectors and 6 relay outputs |
| IPX215D | Expansion module in 10 DIN Rail format with bayonet + screw connectors and 15 relay outputs |
| IPX225D | Expansion module in 10 DIN Rail format with bayonet + screw connectors and 25 relay outputs |
| IPX306D | Expansion module in 4 DIN Rail format with disconnectable + screw connectors and 6 relay outs |

| FEATURES | IPX106D | IPX115D | IPX125D | IPX206D | IPX215D | IPX225D | IPX306D |
|---|------------------------|------------------------|----------------------------------|---|------------------------|------------------------|---|
| Power supply | 24Vac/dc from TF10D | 24Vac/dc from TF20D | 24Vac/dc from TF20D | 24Vac/dc from TF10D | 24Vac/dc from TF20D | 24Vac/dc from TF20D | 24Vac/dc from TF10D |
| Probe inputs | | | | | | | |
| 0÷1V, 0÷5V, 0÷10V, 0÷20mA, 4÷20mA, NTC, PTC, DI | 7 x config | 10 x config | 10 x config | 7 x config | 10 x config | 10 x config | 7 x config |
| Digital inputs | | | | | | | |
| Optoinsulated | 3 x config | 20 x config | 20 x config | 3 x config | 20 x config | 20 x config | 3 x config |
| Relay outputs | | | | | | | |
| Configurable | 6 x 5A | 12 × 5A + 3 × 8A | 18 x 5A + 3 x 8A + 4 x SSR | 5 x 5A + 1 x 8A or 4 x 5A + 1 x 8A + 1 x SSR | 15 x 5A | 21 x 5A + 4 x SSR | 5 x 5A + 1 x 8A or 4 x 5A + 1 x 8A + 1 x SSR |
| Other outputs | | | | | | | 2727 |
| 0÷10V/4÷20mA | | 2 x config | 2 x config | | 2 x config | 2 x config | |
| 0÷10V | 3 | 4 | 4 | 3 | 4 | 4 | 3 |
| LAN CANBus | pres | pres | pres | pres | pres | pres | pres |
| Other | | | | | | | |
| Dip switch for address set | pres | pres | pres | pres | pres | pres | pres |
| Connections | disconnectable | disconnectable | disconnectable | bayonet + screw | bayonet + screw | bayonet + screw | disconnectable - screw |
| Connection kit | DWEX60-30KIT | DWX115-30KIT | DWEX70-30KIT | IP-FCEX60 | IP-FCX215 | IP-FCEX70 | DWEX306-30KF |

IPX106D - IPX206D - IPX306D



IPX115D - IPX125D - IPX215D - IPX225D



iProLINK

CONNECTIVITY MODULE

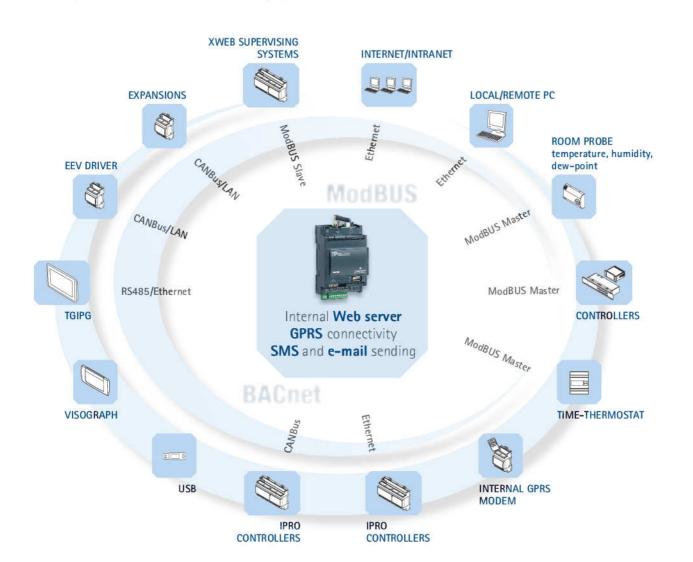
IPL500D

Programmable connectivity module designed to collect, store, process, and manage data. It is compatible with the iPro controllers and allows downloading of applications for data processing or management of other integrated devices



D: 4 DIN Rail

| FEATURES | IPL500D | |
|------------------|---------------------|---|
| Power supply | 24Vac/dc from TF20D | |
| Outputs | | Y D |
| RS485 | slave | Modem Ant. |
| USB | pres | |
| LAN/RS485 master | pres | |
| CANBus | pres | |
| Ethernet | pres | |
| Other | | |
| Remote keyboard | VGIPG | |
| Internal modem | GPRS opt | ANTERNATION SE |
| Real time clock | pres | port |
| Flash memory | 128MB | Supply Remote display RS485 Serial port CAN S |
| Connections | screw | |
| Connection kit | IP-FC500 | Supply Remote display RS485 Serial port CAN \$6 \\ 24\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ |
| BACnet protocol | opt | |



VISOGRAPH

LCD GRAPHIC DISPLAY



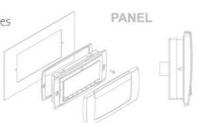
VGIPG

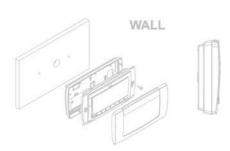
Graphic display fully programmable (via VISOPROG or through USB from the iPro) for iProGENIUS controllers with LCD graphic display with 240x96pixels

VG: 82x156mm

| FEATURES | VGIPG |
|----------------|-----------------|
| Power supply | from controller |
| Visokey output | pres |
| Buzzer | opt |

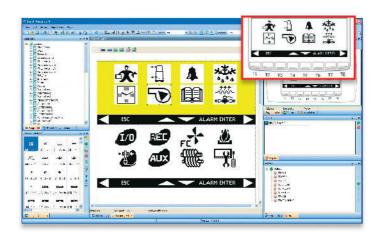
- · Great versatility and extensive customization opportunities
- · Complete integration with ISaGRAF® projects
- · UNICODE character compatible
- · Quick panel or wall mounting
- · Up to 2 keyboards connectable with iPro controllers
- · Maximum distance from the controller: 150m







VISOPROG allows the creation of graphic interfaces for VISOGRAPH keyboards, VGIPG model. The program installed on a PC is connected to the ISaGRAP® project with a basic interface that can be easily customized based on the user's needs. VISOPROG allows a direct transfer of the user interface from PC to a keyboard. The image on the right shows an operative VISOPROG screen with the relative VISOGRAPH final interface



ACCES

ACCESSORY

VISOKEY

Programming kit for Visograph keyboards





SECTION INDEX

FUNCTIONS MODELS

| TGIPG - high programmability | | 118 |
|------------------------------------|--|-----|
| Programmable touch screen displays | TGIPG | 120 |
| Accessories | TF-TGIPG – CAB/485-TGIPG CAB/WEB/PC | 120 |



TGIPG SERIES: HIGH PROGRAMMABILITY

To make easier, more intuitive and complete communication with their controllers, Dixell introduces the innovative family (TGIPG) of TFT touch screen displays, characterized by its aesthetic value and fast Ethernet/Internet connectivity. The versatile and compact line, exceptional hardware performances, advanced functionalities, and a large number of symbols

and templates makes the TGIPG family the perfect solution for HVAC/R needs. The easy programming mode and the use of a graphic editor make the creation of a user interface quick and easy.

- Powerful platform based on ARM9 (400MHz) microprocessor, RAM memory 64MB (DDR2), data storing on FLASH memory 128MB SSD and on external card SD
- Connection with Dixell controllers via RS485 or Ethernet
- · Remote connection (via Internet)
- USB for mouse, printer and application update
- TFT-LCD display 16.7 million colors (true color), LED backlight
- · Solid and elegant silver housing
- · IP65 front protection
- · Advanced graphic (vector) features
- · Ability to create a fast, custom synoptic overview of the unit
- · Complete alarm management
- · Built in data logger
- · Runtime graphics
- · Multilanguage management with automatic translation via Internet
- · Simulation mode to check applications on PC
- 1A max power absorption

HOW to ORDER

TGIPG I P G - A 0 0 0 0

Α

Version

0 = 4,3"

2 = 7"

3 = 10,4"

CONNECTIVITY

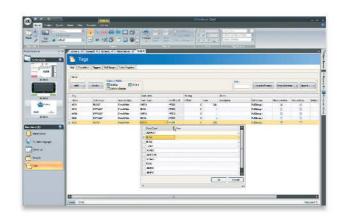
Touch screen displays of the TGIPG line with multiple ports, are characterized by high connectivity both local and remote to satisfy every application need.



SOFTWARE

The TGIPG family is characterized by quick and easy graphic editor that allows for faster creation of applications. The integrated guideline functions, with its large number of symbols and templates, combined with the ability to manage high resolution images allows complex interfaces to be easily created while at the same time being complete, intuitive, and appealing. Effective language management through a dedicated menu and automatic translation via the Internet are among the many strengths of the touch screen line. Below is an example of a "final screen" and an example of a "variables configuration window".





TGIPG

PROGRAMMABLE TOUCH SCREEN DISPLAYS







TGIPG

Programmable TFT touch screen displays

TGIPG: 228x280mm

TGIPG: 143x204mm

TGIPG: 104x145mm

| FEATURES | TGIPG v. 4,3" | TGIPG v. 7" | TGIPG v. 10,4" |
|-----------------------------|-------------------|-------------------|-------------------|
| Power supply | 24Vdc | 24Vdc | 24Vdc |
| Format | 16:9 | 16:9 | 4:3 |
| Display | 480x272pixels | 800x480pixels | 640x480pixels |
| Ethernet output | pres | pres | pres |
| Serial output | 2 x RS485/232/422 | 2 x RS485/232/422 | 2 x RS485/232/422 |
| USB output | pres | pres | pres |
| Buzzer (beeps when pressed) | pres | pres | pres |
| Real time clock | pres | pres | pres |



ACCESSORIES

TF-TGIPG

Power supply 24Vdc/1A for TGIPG



CAB/485-TGIPG

Cable for RS485 connection with connector for TGIPG



CAB/WEB/PC

Ethernet patch cross over cable, 1m





0.0.2...

SECTION INDEX

FUNCTIONS

GLOBAL RETAIL SOLUTION 122 XWEB300D - alarm management and controlling 124 XWEB300D 124 Alarm and controlling web server XWEB500 - XWEB500D - monitoring and controlling 126 Monitoring and controlling web server XWEB500 - XWEB500D 126 XWEB3000 - industrial monitoring and controlling 128 XWEB3000 Industrial monitoring and controlling web server 128 XWEB5000 - monitoring, controlling and supervising 130 Monitoring, controlling and supervising web server XWEB5000 130 **XWEB FUNCTIONS** 132 XWEB CONNECTIONS 134 XWEB SYSTEM GUIDE 136 iCOOLL - wireless solution 137 TX/RX modules for wireless network XJ200 137 Accessory PW200J 137 XJM - I/O management 138 Multifunction module for inputs and outputs XJM60D 139 Keyboard for XJM controller VJM60 139 XJA-XJP-XJR - relay and acquisition management 140 Alarm/status acquisition modules XJA50D - XJA50SL 141 Probe and alarm data acquisition modules XJP30D - XJP40D - XJP60D 141 Relay module XJR40D 141 Keyboard for XJA-XJP-XJR controllers KB1 PRG 141 Accessory CAB/KB11 141 XCENTER - centralized management 142 **XCENTER** Centralized management software for Call Center 142

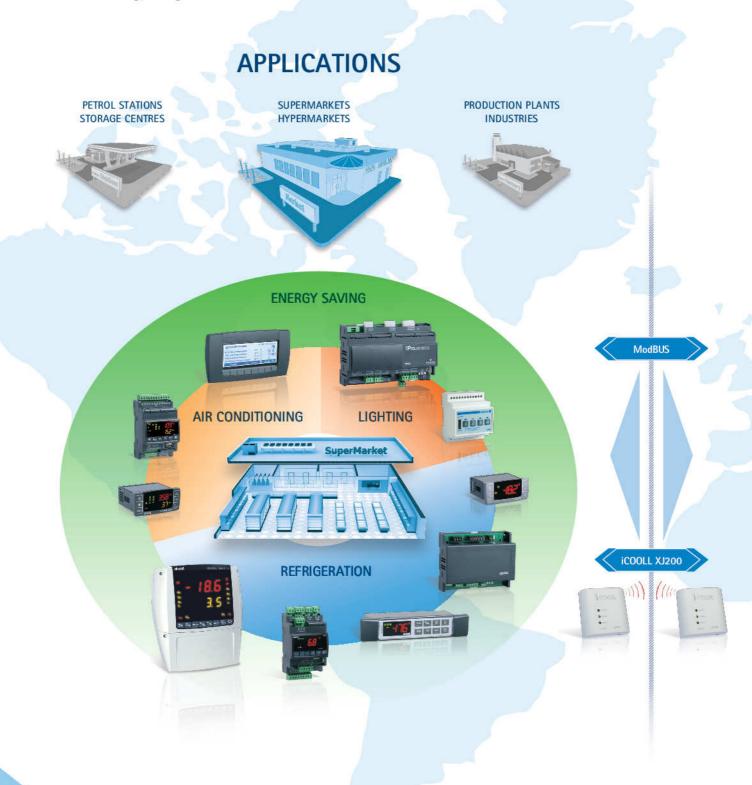
MODELS

GLOBAL RETAIL SOLUTION

Research, great experience, regulation and design innovation: these are the elements that allow Dixell to offer controllers and supervising systems that are in the forefront for all refrigeration applications, cooking and air conditioning fields. A series of specific solutions and a comprehensive range that extends from Thermometers to Multifunction Controllers, from Supervising Systems to the Call Centers, for a completely centralized plant.

In particular, Dixell's systems are a range designed to satisfy all quality, user friendliness and efficiency requirements for every kind of application.

Dixell, with its systems, integrates and coordinates all components of system regulation in order to optimize the efficiency and to increase energy savings.



Some of Dixell's instruments that allow this are:

- the innovative suction pressure management of compressor rack's through CRO
- the dew point check and the modular management of anti-sweat heaters
- · the load supervising and the electric consumption peak management

In addition the typical functions of a monitoring system:

- · the temperature recording according to HACCP regulations
- · the transmission and management of regulation and plant alarms

Results prove that Dixell systems are in synergy with all regulation components ensuring:

- better performance
- greater efficiency
- · a complete local and remote monitoring
- · maximum environmental preservation

XCENTER, the centralized management software ideally suited for a modern and organized Call Center, completes the range of products. A powerful and affordable instrument that allows a remote plant monitoring.

SYSTEMS



XWEB5000



XWEB3000



XWEB500 - XWEB500D



XWEB300D



CALL CENTER







XWEB300D: ALARM MANAGEMENT and CONTROLLING

It is extremely well suited for 6 or 18 device installations such as petrol stations, mini-market, small storage centres. A simple DIN Rail mounting (4 DIN) and the absence of local user interface make the XWEB300 the ideal solution for the remote assistance (via modem) to the plant. Local or remote connection from PC is made without the need for special software, only standard web browser (Microsoft Internet Explorer® or Firefox®) software is needed; the information is displayed as Web pages. The competitive price lets you to use this Web Server in applications with a only a single regulator such as compressor rack and medical close control.

- Data capture and alarm monitoring WEB server connectable to Dixell's controllers with serial output or to others ModBUS-RTU compatible devices
- XWEB is a 10DIN Rail module for easy DIN Rail mounting (DIN) directly inside the machine board or wall mounting with brackets
- Quick and easy connection to Web pages with dedicated interface for PDA/Smartphone
- Possibility to see and modify the parameters of the connected devices remotely
- Complete and simplified analysis of the unit functioning thanks to a powerful tool that allows viewing data in graphical format (Excel®)
- One year of stored data inside the XWEB memory (one year of stored data with 15min sampling time for 6 or 18 controllers)
- XWEB is always accessible even with isolated installations using the built-in GPRS connectivity (optional)
- Access to customized functions
- Data export on USB pendrive
- · Alarm sending via FAX, SMS or e-mail
- 15VA max power absorption

| HOW | to | OF | RD | ER |
|-----|----|----|----|----|
| | | | | |

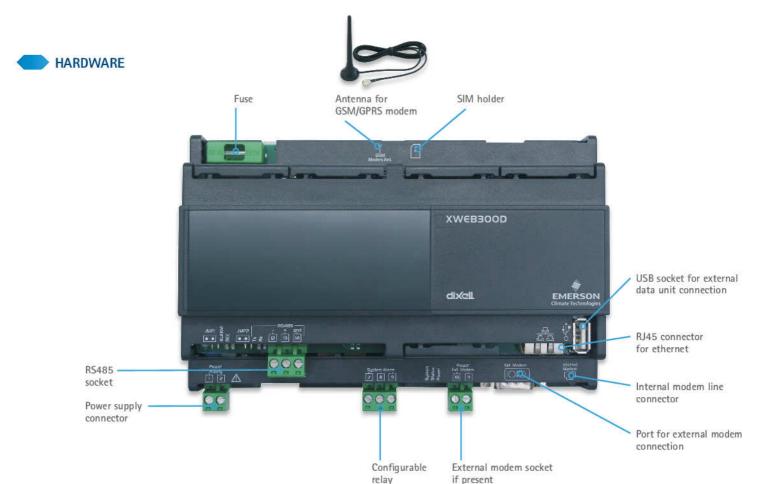
| XWEB300D | X | W | Ε | В | 3 | 0 | 0 | D | | Α | В | 0 | 0 | Е |
|----------------|---|---|------|-------|-------|------|---|------|------|------|-----|---|---|---|
| A | | | | | В | | | | | | Ε | | | |
| Power supply | | | N° (| of ir | strui | ment | S | Inte | rnal | mod | lem | | | |
| 2 = 24Vac | | | B= | 6 | | | | 0 = | No | | | | | |
| 8 = 110÷230Vac | | | F= | 18 | | | | 1 = | Anal | ogue | | | | |
| | | | | | | | | 2 = | GSM | /GPR | S | | | |

XWEB300D checks the unit and, in case of malfunction alarm, it notifies the assistance center through FAX, SMS or e-mail. It allows OEM's via direct control to decide to engage a local service call out only if necessary. XWEB300D can also record all data relevant to the function of the controlled unit and insert them into a table. In this way the OEM has important information for new models for improvement of the unit itself.

Thanks to LAN port, the connection (also via internet) to the XWEB300D is easy and safe and no special software is required. It is possible to see all the variables of a controller and to manage of all parameters and alarms. With Java Applet it is possible to generate comprehensive visual graphs.



| FEATURES | XWEB300D |
|----------------|--------------------------|
| Power supply | 24, 110÷230Vac |
| LAN output | pres |
| USB output | pres |
| RS485 output | pres |
| Relay output | 1 config |
| Sampling time | from 1 to 60 minutes |
| External modem | analogue or GSM |
| Internal modem | analogue or GSM/GPRS opt |





XWEB500-XWEB500D: MONITORING and CONTROLLING

It is extremely well suited for medium installations up to 36 or 100 devices, such as petrol stations, supermarkets or storage centers. Its innovative and useful features make the instrument suitable for medium-large applications such as production and storage goods centers. Thanks to its two available formats, it can be installed whether on DIN Rail or wall or panel mounting, but can also be used as desk instrument. Local or remote connection from a PC is made without the need of special software, only a standard web browser (Microsoft Internet Explorer® or Firefox®) software is needed; the information is displayed as Web pages.

- · Data capture and alarm monitoring WEB server connectable to Dixell's controllers with serial output or to others ModBUS-RTU compatible devices
- Ability to operate in stand alone mode thanks to the local display and keyboard (XWEB500)
- Easy DIN Rail mounting (DIN) directly inside the machine board or wall mounting with brackets (XWEB500D)
- Quick and easy connection to Web pages with dedicated interface for PDA/Smartphone
- · Possibility to see and modify the parameters of the connected devices remotely
- · Complete and simplified analysis of the unit functioning thanks to a powerful tool that allows to view data in graphical format (Excel®)
- . One year of stored data inside the XWEB memory (one year of stored data with 15min sampling time for 36 or 100 controllers)
- XWEB500D is always accessible even with isolated installations using the built-in GPRS connectivity (optional)
- · Layout for netsurfing of web site in graphic format
- · Data export on USB pendrive
- Performance Meter for cooling demand control
- · Alarm sending via FAX, SMS or e-mail
- 15VA max power absorption for XWEB500D and 20VA max for XWEB500

HOW to ORDER

| XWEB500 | X | W | Е | В | 5 | 0 | 0 | (=) | Α | В | 0 | 0 | Е | | |
|--------------------|-------|----|---|---|---|------|------|------|-------|-----|---|----|-------|--------|-----|
| XWEB500D | X | W | Ε | В | 5 | 0 | 0 | D | - | Α | В | 0 | 0 | Е | |
| 1 | A | | | | | | | В | | | | | | | E |
| Power supply | | | | | N | ° of | inst | rume | ents/ | CRO | | Ir | itern | al mod | lem |
| 2 = 24Vac (for XWE | B500[|)) | | | Н | = 30 | 6/no | | | | | 0 | = No |) | |

T = 100/no

| 4 = | 110Vac (for XWEB500) |
|-----|----------------------|
| 5 = | 230Vac (for XWEB500) |

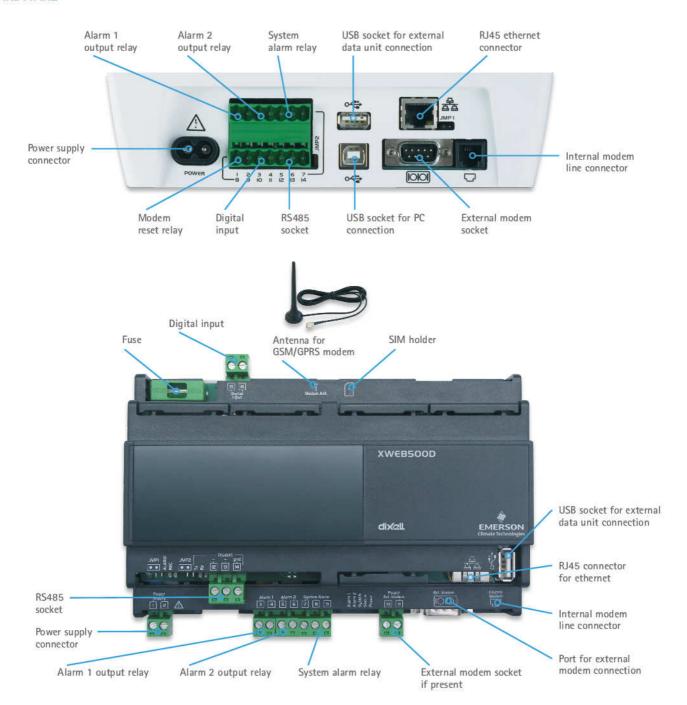
| 5 = | 230Vac (for) | (WE | B500) | |
|-----|---------------|------|-------|----|
| 8 = | 110÷230Vac | (for | XWEB5 | 00 |

| _ | | Contract of the Contract of | |
|---|-----------|-----------------------------|--|
| = | 36/no | | |
| _ | 50/CRO (1 | engine) | |

| 1 engine) | 1 = Analog |
|-----------|------------|
| | 2 = GSM/G |

| FEATURES | XWEB500 | XWEB500D |
|----------------|----------------------|--------------------------|
| Power supply | 110, 230Vac | 24, 110÷230Vac |
| LAN output | pres | pres |
| USB output | 2 | 1 |
| RS485 output | pres | pres |
| Relay output | 3 | 3 |
| Digital input | pres | pres |
| Sampling time | from 1 to 60 minutes | from 1 to 60 minutes |
| External modem | analogue or GSM | analogue or GSM |
| Internal modem | analogue opt | analogue or GSM/GPRS opt |

HARDWARE





XWEB3000: INDUSTRIAL MONITORING and CONTROLLING

It is extremely well suited for larger installations with up to 247 devices such as supermarkets, hypermarkets or large storage and distribution centers as well as production and storage goods processing such as fast-food, restaurants, catering up to medical and pharmaceutical applications. XWEB3000 is the ideal solution for service needs (modem, ethernet and internet connection); it can operate, as a stand-alone server without using a PC but it's also simple to connect a monitor, keyboard and mouse. Local or remote connection from a PC is made without the need of special software; only a standard web browser (Microsoft Internet Explorer® and Firefox ®) software is needed.

- Data capture and alarm monitoring WEB server connectable to Dixell's controllers with serial output or to others ModBUS-RTU compatible devices
- 19" RACK or desk mounting
- Quick and easy connection to Web pages with dedicated interface for PDA/Smartphone
- All controller values can be shown using a special "Single View" window or using "Run Time" window where many controllers
 can be viewed at the same time. It is even possible to use a "Layout" view of the plant with pictures and schematics
 drawings
- Complete and simplified analysis of the unit functioning thanks to a powerful tool that allows to view data in graphical format (Excel®)
- One year of stored data inside the XWEB memory (one year of stored data with 15min sampling time)
- . Easy plant management by means of the "Scheduler" to send commands according to a custom calendar
- Calendar function and internal RTC both for alarm transmission to the "in charge" service and command sending to the controllers
- · Possibility to divide the controllers set in different categories of products with their own sampling time
- · Ability to select particular data on which to perform the monitoring with reduced sampling time
- · Alarm sending via FAX, SMS or e-mail
- · Commands sending activation through digital input
- Standard communication protocol ModBUS-RTU
- 50VA max power absorption

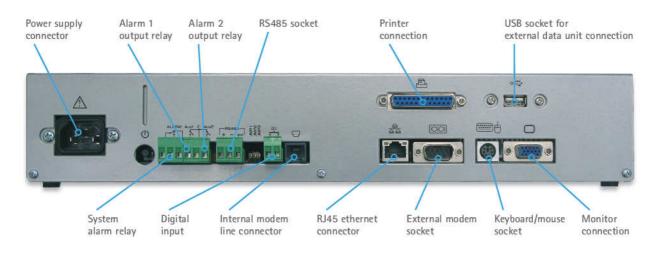
Easy configuration, efficient management of all controller values and a display of controllers also using pictures and schematic drawings: these are some of the XWEB3000's strengths. It is an intuitive, powerful and at the same time, very versatile device. This web server allows parameter and alarm management with different levels and typologies, providing the user with the possibility to divide the controllers into different categories, each with their own sampling periods. Powerful tools include: the scheduler which is a graphic instrument created to manage commands sent to the controllers, data export used to save data in a Microsoft Excel file, and the back-up function to have data-safe protection even in the worst environmental usage, also to save all the unit setup.

The alarm signalling for service is very flexible and can be done through FAX, e-mail, SMS and also via relay outputs.



| FEATURES | XWEB3000 |
|-----------------------|-----------------------|
| Power supply | 110÷230Vac |
| LAN output | pres |
| USB output | 2 |
| RS485 output | pres |
| Relay output | 3 |
| Digital input | pres |
| Printer output | 25 pin |
| Keyboard/mouse output | pres |
| Video output | pres |
| Sampling time | from 1 to 255 minutes |
| External modem | analogue |
| Internal modem | analogue opt |

HARDWARE





XWEB5000: MONITORING, CONTROLLING and SUPERVISING

It is provided with a powerful supervision engine suited for larger installations (with up to 247 devices) in the refrigeration, conditioning and building automation field, where it is necessary to program several different interactive actions that the controller has to perform. It is extremely well suited to hypermarkets, large storage and distribution centres, as well as production and storage goods processing and is ideal for the large service center (modem, ethernet and internet connection). The system manages the alarm transmission to the "in charge" service (via FAX, e-mail, SMS and also through relay outputs) and it can also work without a PC using direct connection of a monitor, keyboard and mouse. Local or remote connection PC is made using Microsoft Internet Explorer® and Firefox® browser.

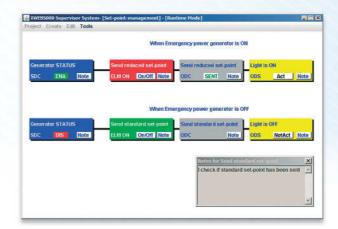
- Monitoring, controlling and supervising web server connection to Dixell's controllers with serial output and to other ModBUS-RTU compatible devices
- 19" RACK or desk mounting
- · Built-in editor with local and field simulator
- · Quick and easy connection to Web pages with dedicated interface for PDA/Smartphone
- All controller values can be displayed using a special "Single View" window or a "Run Time" window with many controllers
 viewed at the same time. The ability to use a "Layout" view of the plant with pictures and schematic drawings is also an
 option
- Complete and simplified analysis of the unit functioning thanks to a powerful tool that allows to view data in graphical format (Excel®)
- One year of stored data inside the XWEB memory (one year of stored data with 15min sampling time)
- · Easy plant management by means of the "Scheduler" to send commands according to a custom calendar
- Calendar function and internal RTC both for alarm transmission to the "in charge" service and command sending to the controllers
- Possibility to divide the controllers set in different categories of products with their own sampling time
- · Ability to select particular data on which to perform the monitoring with reduced sampling time
- · Alarm sending via FAX, SMS or e-mail
- · Commands sending activation through digital input
- Standard communication protocol ModBUS-RTU
- 50VA max power absorption
- · DPC (Dew Point Control) for anti-sweat heater management

HOW to ORDER



SUPERVISING

With XWEB5000 it is possible to intercept sending commands to monitored devices. The installer can create a supervision "Project" (or several "Projects") by programming links between the input variables (inputs, status and outputs of a controller) and defining what actions the system must take when these conditions are met. Unlike a standard PLC, where the user is required to know a specific programming language, with the XWEB5000 the "project" can be easily created using a simple graphic user interface, but more importantly, without the need to learn a complex programming language. Specific software is not necessary: the supervising software has been written in JAVA and it runs on the client PC. The project is saved to the XWEB5000; several projects can be run simultaneously.

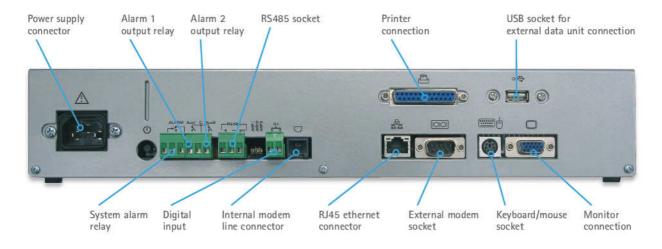


AUTOMATION

The high versatility and programmability allow the XWEB5000 to perform automation programs. In fact it's possible, for example, to manage the use of plant lights, internal or external signs, the battery charge/discharge as fork lifts, increasing the energy saving process. In case of compressor fault or when the absorption threshold exceeds the set, etc., the monitoring unit can automatically interact with the rest of system.

| FEATURES | XWEB5000 | |
|-----------------------|-----------------------|--|
| Power supply | 110÷230Vac | |
| LAN output | pres | |
| USB output | 2 | |
| RS485 output | pres | |
| Relay output | 3 | |
| Digital input | pres | |
| Print output | 25 pin | |
| Keyboard/mouse output | pres | |
| Video output | pres | |
| Sampling time | from 1 to 255 minutes | |
| External modem | analogue | |
| Internal modem | analogue opt | |

HARDWARE



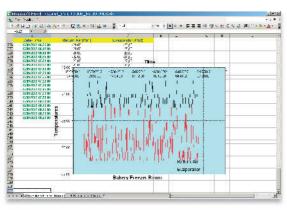
XWEB FUNCTIONS

An overview of some most important XWEB family functions.



PARAMETER PROGRAMMING and RUN TIME

Thanks to the XWEB the user has an intuitive, powerful and versatile device all in one that allows modification of various functioning parameters of the instruments. It will no longer be necessary to make manual adjustments on the controller, because by using the different windows available, and with a few simple operations, it is possible to obtain the required updating. The Run Time function displays many devices together in a unique window. This is dynamic page and the data showed is updated in real time. The status of the devices connected (also from different manufacturers) is displayed simply and clearly and it is possible to modify the various functioning parameters of the instruments.



RS485 LINE-CHECK

A powerful new tool is able to check performance and statistical data for each controller by carrying out a functional test for every device connected to the RS485 network. You can then have information regarding the quality of the connection. The tool is very useful especially when there is the necessity analyze a network problem; with statistics that allow you to easily identify which instrument has a connection problem.



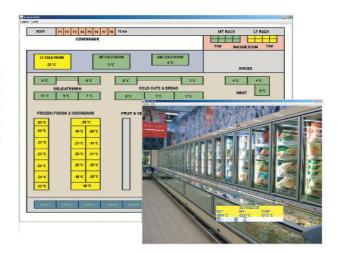
DATA EXPORT

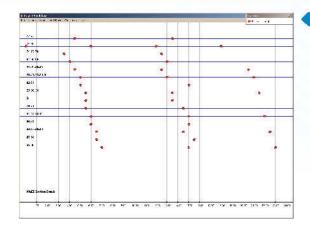
It is possible to export all data information in a Microsoft Excel® file. The user can later use this information to build graphs or to collect data. It is possible to select a data interval and filter between different controllers.

LAYOUT & GLOBAL COMMANDS

(for XWEB500D, XWEB500, XWEB3000, XWEB5000)

A powerful graphic editor that doesn't require the installation of any additional software on your PC is what makes XWEB layout the ideal solution. Using this function, the user can access all the recorded data of the controllers and even send a command to a controller. Global Commands option let you send multiple commands to one or more controllers at the same time. In addition, using the digital input it is possible to automatically start the sending of commands.





SCHEDULER

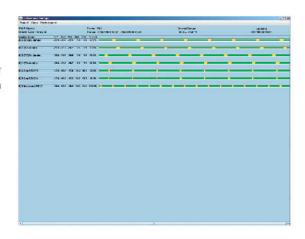
(for XWEB500D, XWEB500, XWEB3000, XWEB5000)

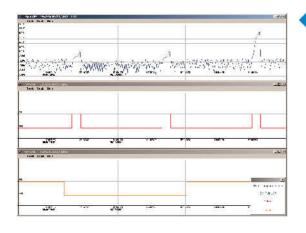
The scheduler is a powerful graphic tool to manage commands sent to the controllers. You can quickly see an overview of all daily activity. This means that energy saving routines and defrosts can be easily scheduled.

PERFORMANCE METER

(for XWEB500D, XWEB500, XWEB3000, XWEB5000)

This highly appreciated function allows users to verify the right temperature for single devices (wall cabinets, benches, rooms, and more). The graphical layout offers a complete view of the plant operating mode.





GRAPHICS

(for XWEB300D, XWEB500D, XWEB500, XWEB3000, XWEB5000)

CIRCULAR GRAPHICS

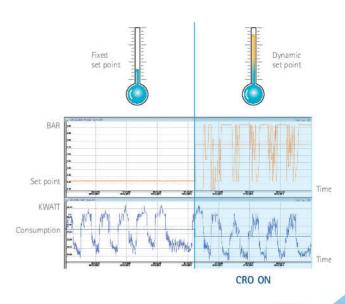
(for XWEB3000, XWEB5000)

The XWEB can supply powerful graphs that areable to represent multiple analoge variables on the same pictorial system and the course of the status of the outputs and alarms. This allows the user to have a precise snapshot view of important variables for easy diagnosis of faults. Thanks to the high sampling rate of circular graphs, they are more detailed and appreciated by service personnel for diagnostics.



(for XWEB500D, XWEB500, XWEB5000)

Thanks to the special CRO algorithm (Compressor Rack Optimization), the connection to the modern supervising systems (of Dixell) allows the management of the compressor rack set point in the best possible way, depending on the devices connected, which can result in plant optimization and energy savings. The system, equipped with the CRO function, analyzes the information from the controller to determine if a controller needs more refrigeration power and how much. The set point will be recalculated in order to satisfy the worse instance and sent from the supervising system to the XC1000D compressor rack controller; this will be the new working set point. If the supervising system can't manage the XC1000D, it's the controller that "decides" to replace the set point (coming from the system) and will then re-define the set point in the planning phase of a refrigeration plant. The two graphs emphasize that when the CRO algorithm is active, in a real installation, the set point becomes on average higher, and consequently the energy consumption decreases. The dotted line represents the average weekly value.



XWEB CONNECTIONS

The high connectivity is one of the main XWEB family's strengths; see below for an overview of several methods to connect with the systems.



When the connection is made by means of a Palmtop computer (PDA), the XWEB automatically recognizes it and makes several dedicated pages available. It is possible to display all the values of a device and send it commands on the PDA.



LOCAL CONNECTIONS

XWEB server and associated systems can be locally linked connecting the system to a PC.



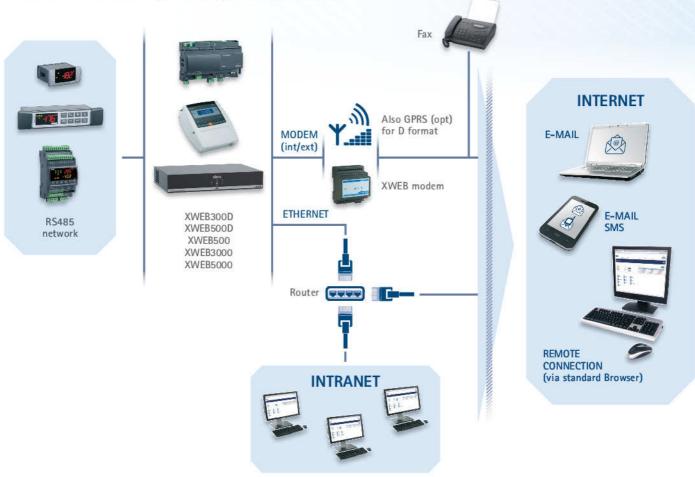
The complete and powerful hardware platform typical of XWEB3000 and XWEB5000 systems allows them to be used as the local machine by way of monitor, keyboard and mouse connection.



REMOTE CONNECTIONS

XWEB Servers can be remotely accessed using several methods:

- by modem with point to point connection, also with GSM modem (only for devices that support it);
- · by link in local Ethernet network, by means of standard net connector RJ45;
- by direct Internet connection, if provided with a public and static IP address.



The GPRS connectivities are a popular favorite, which distinguishes it as a best-solution in case of alarm management with medium-small applications, and the ETHERNET in case of tele-assistance and contron with medium-large applications.



XWEB SYSTEM GUIDE

| | XWEB300D | XWEB500D | XWEB500 | XWEB3000 | XWEB5000 |
|----------------------------------|-----------------------------|-----------------------------|----------------------|-----------------------|------------------------|
| Applications | small and medium | medium and large | medium and large | large | large with supervision |
| Format | 10 DIN Rail | 10 DIN Rail | 210x230x87h | 350x235x47h | 350x235x47h |
| Power supply | 24Vac or 110÷230Vac | 24Vac or 110÷230Vac | 110Vac or 230Vac | 110÷230Vac | 110÷230Vac |
| Display | | | • | | |
| N° of instruments | 6 - 18 | 36 - 100 | 100 | 247 | 247 |
| USB port for PC connection | | | • | | |
| USB output for device connection | • | • | • | • | • |
| Relay output | 1 | 3 | 3 | 3 | 3 |
| Digital input | | • | • | • | • |
| LAN output | • | • | • | • | • |
| RS485 output | | • | • | • | |
| External modem | analogue or GSM | analogue or GSM | analogue or GSM | analogue | analogue |
| Internal modem | analogue or GSM/GPRS opt | analogue or GSM/GPRS opt | analogue opt | analogue opt | analogue opt |
| Sampling time | from 1 to 60 minutes | from 1 to 60 minutes | from 1 to 60 minutes | from 1 to 255 minutes | from 1 to 255 minute |
| RS485 line check | • | • | • | • | • |
| Parameter programming | • | • | • | • | |
| Run time function | • | • | • | • | |
| Data export in Excel® format | • | • | • | • | |
| Graphics | • | 9 | • | • | • |
| Layout function | | • | • | • | • |
| Scheduler function | | • | • | • | |
| Global commands | | • | • | • | • |
| Performance meter | | • | • | • | • |
| Circular graphics | | | | • | • |
| Supervision module | | | | | • |
| | | | | | |



iCOOLL SERIES: WIRELESS SOLUTION

- TX/RX modules (XJ200) for wireless network dedicated to data monitoring (the master module has to be connected to the XWEB, the slave modules are connected to the instruments through the ModBUS protocol)
- Self-configuring MESH system for the optimization of communication (the network is able to create and to use all possible "connections" between the master and the slave node)
- · User-friendly and less installation time and costs
- Operating frequency: 868Mhz (922Mhz for US market FCC approved)
- High range (450m no obstacles)
- · Ability to connect up to 240 instruments to the same XJ200
- · Ability to manage up to 20 HOP
- · Ability to connect up to 40 XJ200 to the same net
- 1,5m wire (power supply/RS485) with functional bracket included (fig. 1)
- · Standard communication protocol ModBUS-RTU
- 0,25VA max power absorption



HOW to ORDER



Frequency

0 = 868 Mhz

1 = 922Mhz



PW200J

Power supplier for XJ200 modules with TTL-RS485 converter





XJM: I/O MANAGEMENT

- · Acquisition and command module for refrigeration, air conditioning and BMS applications
- · Great flexibility: all the necessary I/O types in one device
- · Configurable analog inputs
- Data acquisition by means of sensors with alarm limits
- . Up to 12 digital inputs for alarms, status and sensors interlock
- · Pressure/temperature conversion
- · Available with or without display
- · Hot Key or Prog Tool Kit connector for quick and easy programming
- · Serial connection to monitoring systems or BMS
- 20VA max power absorption
- Dual display with red LED (8,5mm high) and yellow LED (7,5mm high) and 17 icons

TYPICAL APPLICATIONS

Retrofit and data acquisition for:

- Cabinets
- Cold rooms with 2 evaporators
- Compressor racks up to 4 compressors
- Pulses counters

HOW to ORDER

| XJM60D | X | J | M | 6 | 0 | D | - | Α | В | c | 0 | 0 |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|
| VJM60 | ٧ | J | М | 6 | 0 | = | 0 | 0 | 0 | 0 | 0 | |

| A | В | C |
|--------------|---------------|-------------|
| Power supply | Display | N° of relay |
| 2 = 24Vac | 0 = No | 1 = 1 |
| 4 = 110Vac | 1 = Yes | 4 = 4 |
| 5 = 230Vac | W1 3335507 | |

MULTIFUNCTION MODULE and KEYBOARD for INPUT and OUTPUT MANAGEMENT



XJM60D | Multifunction module for inputs and outputs with management of up to 4 relays

VJM60 Keyboard for XJM60D module





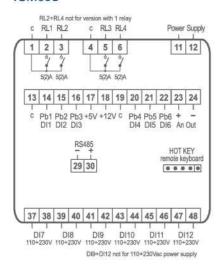
D: 4 DIN Rail

100x64mm

| FEATURES | | VJM60 | | | |
|--|-------------------------------|--|---------------------------------|--|-------------------------------------|
| First display: n° digits Second display: n° digits Power supply | 4 d.p. 4 d.p. 24Vac | no display 24Vac | 4 d.p. 4 d.p. 110, 230Vac | no display | 4 d.p. 4 d.p. from controller |
| Inputs | | | | | |
| Probe Digital (free of voltage) Digital (power supply voltage) | 6 x config* | 6 x config* | 6 x config* | 6 x config* | |
| Relay outputs | | | | | |
| Configurable | 1 x 5A, 4 x 5A | 1 x 5A, 4 x 5A | 1 x 5A | 1 x 5A | |
| Other | 1.0 | | | | |
| Hot Key/Prog Tool Kit Remote keyboard Analog output Serial output | pres 4÷20mA/0÷10V RS485 | pres VJM60 4÷20mA/0÷10V RS485 | pres 4÷20mA/0÷10V RS485 | pres VJM60 4÷20mA/0÷10V RS485 | |

^{*} Up to 6 digital inputs or $6 \times NTC/PTC/Pt1000$ probe inputs or $3 \times NTC/PTC/Pt1000$ probe inputs $+ 3 \times 4 \div 20 \text{mA}/0 \div 5 \text{V}/0 \div 10 \text{V}/\text{pulse}$ probe inputs

XJM60D





XJA-XJP-XJR SERIES: RELAY and ACQUISITION MANAGEMENT

- Digital inputs for local enable/disable of relays (XJR)
- . Data acquisition modules suitable for collecting data from any kind of installation (XJP)
- Up to 6 inputs for NTC, PTC, 4÷20mA and 0÷10V and 3 digital inputs or 4 Pt100 inputs and 4 digital inputs (XJP)
- Up to 10 line voltage inputs (XJA)
- Direct line power supply 230 (110) Vac. No external transformer required
- · Remote display option
- Hot Key or Prog Tool Kit connector for quick and easy programming
- · Serial connection to monitoring systems
- 6VA max power absorption

HOW to ORDER XJR X J R 4 0 D - A 0 C 0 0 Α C Power supply Buzzer 2 = 24Vac **0** = No 4 = 110Vac 1 = Yes 5 = 230Vac XJA-XJP30/60 X D - A B C D E XJP40 X J P 4 0 D -A B 0 R 4 XJA50SL X J A 5 0 S L A 0 0 0 0 A C D E В Measurement unit Alarm relay Probe inputs Digital inputs Power supply 2 = 24Vac C = °C P = PTC 3 = 3 (only for XJP30/60D) **0** = No 4 = 110Vac F = °F N = NTC5 = 5 (only for XJA50D) 1 = Yes (only for XJA50D)5 = 230Vac N = No temperature $A = 4 \div 20 \text{mA}$ 6 = 6 (only for XJP30D) $W = 0 \div 10V$

0 = No

KEYBOARD and RELAY MODULES and PROBE and ALARM ACQUISITION MODULES

XJA-XJP-XJR

| XJA50D XJA50SL | Alarms/status acquisition modules able to read up to 5 + 5 independent inputs (master + slave) |
|----------------------------|--|
| XJP30D XJP40D XJP60D | Probes and alarms data acquisition modules able to read up to 9 different inputs |
| XJR40D | Relay module able to manage up to 4 independent outputs |
| KB1 PRG | Programming keyboard for XJA50D - XJP30D - XJP40D - XJP60D - XJR40D modules |





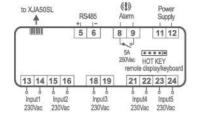
D: 4 DIN Rail

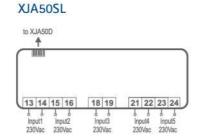
100x64mm

| FEATURES | XJA50D | XJA50SL | XJP30D | XJP40D | XJP60D | XJR40D | KB1 PRG |
|---|-------------------------------------|-----------------|--|-------------------------------------|--|--------------------------------------|---------------------------------|
| Display: n° digits Keyboard: push buttons Power supply | 24, 110, 230Vac | from controller | 24, 110, 230Vac | 24, 110, 230Vac | 24, 110, 230Vac | 4 24, 110, 230Vac | ± 3 d.p. 6 from controlle |
| Inputs | | | | | | | |
| Analogue Digital (power supply voltage) Digital (free of voltage) | 5 | 5 | 3 x NTC, PTC, 4÷20mA, 0÷10V 3 3 opt | 4 x Pt100 | 6* x NTC, PTC, 4÷20mA, 0÷10V 3 3* | 4 | |
| Relay outputs | | | | | | | |
| Alarm Load | 5A opt | | | | | 4 x no 8A/nc 5A | |
| Other | | | | | | | |
| Hot Key/Prog Tool Kit output Remote display/keyboard output Serial output Serial addresses Buzzer | pres X-REP/KB1 PRG RS485 5 | 5 | pres X-REP/KB1 PRG RS485 3 | pres X-REP/KB1 PRG RS485 4 | pres X-REP/KB1 PRG RS485 6 | pres KB1 PRG RS485 1 opt | |

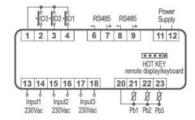
^{*} XJP60D has 3 analogue inputs that are configurable as free of voltage digital inputs

XJA50D

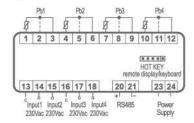


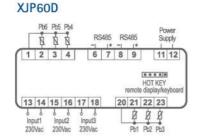


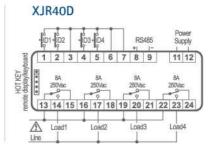
XJP30D



XJP40D





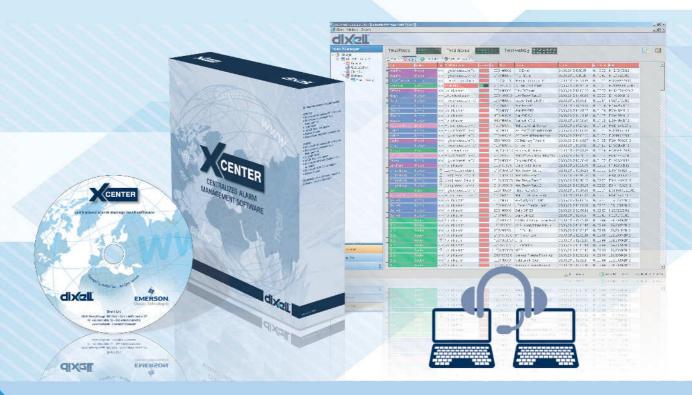


ACCESSORY

CAB/KB11

1m cable to connect the keyboard to the XJA-XJP-XJR modules





XCENTER: CENTRALIZED MANAGEMENT

Designed and developed in order to monitor plants that are positioned in different zones, XCENTER is a flexible, reliable and user-friendly software package. Efficient assistance is a widespread requirement among distribution centers, small and large supermarkets, industrial plants, and more. XCENTER gives this type of support with alarm management, continuous device checks, and recipient management with functional reports. XCENTER doesn't have limits regarding the number of plants and controllers that can be checked and is suitable for every kind of requirement.

- Modular software that, when installed in a server PC, communicates with clients (XWEB systems and remote PC)
- · Data and alarms files from real installations, available for all clients
- · User interface is simple to understand
- · Multilanguage management
- · Geo-location positioning and controllers status
- · Command sending to real instruments via XWEB interface
- Possibility to quickly modify controllers parameters via XWEB interface
- · Alarm setup and management
- Alarm report via e-mail SMS
- · Recipient list management
- · Statistical data management in graphical format
- Connection between XCENTER and the monitoring units are by means of internet or telephone line (via dial-up or an internet provider)
- . Open project that allows add-on software (warehouse and accountant management,...); development on request

HOW to ORDER X C E N T E R - A B O O O A B B N° of server N° of client O = O A = 1 B = 2 L = 10

The XCENTER SOLUTION

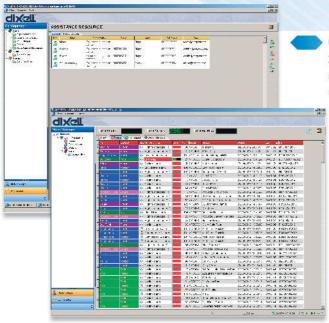


The XCENTER software is composed of two parts.

- XCENTER Server is a server application that manages the Oracle® database and the communication to all connected XWEB controllers. It contains all
 receiving and sending notifications of alarms, user management, and control signals.
- XCENTER Client is the operator interface that is connected to the XCENTER Server and gives a list of alarms, statistics, and configuration tools of all plants
 monitored by the XWEB family and their web pages by means of the integrated browser. XWEB gives quick access to the monitored controllers with their
 parameters, commands, and historical data giving a prompt reply about actual conditions or environment with the ability to intervene remotely to solve
 possible critical situations.

XCENTER INSTALLATION LAYOUT



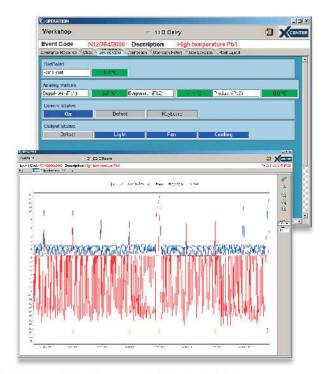


CONTACTS

XCENTER uses a list of recipients to be contacted for local, regional and national events. Based on need, and according to the alarm severity, the right person will be alerted.

ALARM MANAGEMENT

With XCENTER the default level of severity can be increased according to the duration, the frequency, the time of the day.



COMMANDS and PARAMETERS

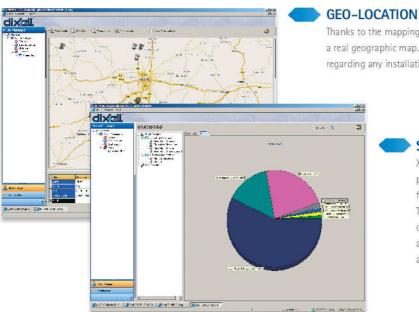
The XCENTER user is authorized to interact with the controller directly from the program or it has the possibility to be connected to the XWEB and start using it just like via the browser. For every alarm the software creates a report to describe the complete history of the alarm.

GRAPHICS

Alarms are displayed together with the log of the past 48 hours of the controller functions. It's possible to determine and understand the kind of problem and decide how and when intervene.

KEEP ALIVE

The "Keep Alive" function is meant to check the hardware status of the monitored installation periodically to ensure reliability of critical devices.



Thanks to the mapping technology, it is possible to place your installations on a real geographic map. This feature allows the user to find information quickly regarding any installation that sends an alarm.



STATISTICS

XCENTER is provided with several models that generate powerful statistical tools that are used to analyze frequent alarms, critical device installations, or sites. The statistics are useful in preventing critical product or plant situations. There is also the possibility to group alarms together by typology, time interval, installation, and more.



PROBES

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PROBES

TEMPERATURE PROBES



NTC PROBES

The probes with NTC thermistor are designed for applications where high accuracy and the short responce time are important. The probes pass several tests, this is why we guarantee a very high reliability.

| PROBE | DESCRIPTION | CABLE | TEMP. RANGE | |
|-------|--|------------------------------|------------------------|---|
| NS6 | General purpose, resinated, IP67, inox steel cap "dimension Ø6x30mm" | PVC 1,5m - 3,0m | -30÷80°C -22÷176°F | |
| NS6W | General purpose, resinated, IP67, with 6,3mm faston, inox steel cap "dimension Ø6x30mm", for WING K | PVC 1,5m - 3,0m | -30÷80°C -22÷176°F | |
| NS6S | General purpose, resinated, IP67, inox steel cap "dimension Ø6x30mm" | Silicone 1,5m – 3,0m | -40÷110°C -40÷230°F | |
| NS6SJ | General purpose, resinated, IP67, 2 pole connector, inox steel cap "dimension Ø6x30mm" | Silicone 1,5m – 3,0m | -40÷110°C -40÷230°F | 1 |
| NS6SW | General purpose, resinated, IP67, with 6,3mm faston, inox steel cap "dimension Ø6x30mm", for WING K | Silicone 1,5m – 3,0m | -40÷110°C -40÷230°F | |
| NG6 | General purpose, over-molded, IP67, thermoplastic cap "dimension Ø6x15mm" | Thermoplastic 1,5m – 3,0m | -40÷110°C -40÷230°F | |
| NG6F | General purpose, over-molded, IP67, with 2,8mm faston, thermoplastic cap "dimension Ø6x15mm", for XT11S 12Vac and 24Vac/dc | Thermoplastic 1,5m – 3,0m | -40÷110°C -40÷230°F | |
| NG6W | General purpose, over-molded, IP67, with 6,3mm faston, thermoplastic cap "dimension Ø6x15mm", for WING K | Thermoplastic 1,5m – 3,0m | -40÷110°C -40÷230°F | |
| NG6K | General purpose, over-molded, IP68, Hot Key connector, thermoplastic cap "dimension Ø6x15mm" | Thermoplastic 1,5m – 3,0m | -40÷110°C -40÷230°F | |

| NG6P | General purpose, over-molded, IP68, cap "dimension 05x20mm" | Thermoplastic | -40÷110°C | | |
|--------|---|------------------------------|------------------------|-----------|-----|
| NG6PJ | General purpose, over-molded, 2 pole connector, cap "dimension Ø5x20mm" | 1,5m - 3,0m | -40÷230°F | * | |
| NX6P | Thermoplastic, IP68, inox steel cap "dimension Ø6x20mm" | Thermoplastic | -40÷110°C | | |
| NX6PJ | Thermoplastic, IP68, 2 pole connector, inox steel cap "dimension Ø6x20mm" | 1,5m - 3,0m | -40÷230°F | 1 | |
| NY6P | Thermoplastic, IP68, inox steel cap "dimension Ø6x50mm" | Thermoplastic 1,5m - 3,0m | -40÷110°C | | |
| NY6PJ | Thermoplastic, IP68, 2 pole connector, inox steel cap "dimension Ø6x50mm" | | -40÷230°F | * | |
| NP4-67 | Pipemount fitting "Ø4÷Ø30mm in diameter", IP67, over-molded, copper sensor | Thermoplastic 1,5m - 3,0m | Thermoplastic -40÷110 | -40÷110°C | 200 |
| NT6-67 | Pipemount fitting "Ø4÷Ø30mm in diameter", IP67, over-molded, thermoplastic sensor | | -40÷230°F | | |
| NT6 | Pipemount fitting | PVC 1,5/2,0m | 0÷80°C 32÷176°F | 1 | |
| N6F2 | General purpose, resinated, IP67, with 2,8mm faston, double insulation, nylon cap "dimension Ø7x30mm", for XT11S 230Vac | PVC 1,5/2,0m | -30÷105°C -22÷221°F | | |

PTC PROBES

The probes with PTC thermistor are designed for both cooling and heating applications. The temperature range is $-50 \div 150$ °C ($-58 \div 302$ °F).

| PROBE | DESCRIPTION | CABLE | TEMP. RANGE | |
|-------|---|-------------------------|------------------------|---|
| S6 | General purpose, resinated, IP67, inox steel cap "dimension Ø6x30mm" | PVC 1,5m - 3,0m | -30÷80°C -22÷176°F | |
| S6.R | Water proof, resinated, IP67, inox steel cap "dimension Ø6x40mm" | PVC 1,5m - 3,0m | -30÷80°C -22÷176°F | |
| S6.S | Water proof, resinated, inox steel cap "dimension Ø6x40mm" | Silicone 1,5m – 3,0m | -50÷120°C -58÷248°F | |
| S6.SH | Heating applications, inox steel cap "dimension Ø6x40mm" | Silicone 1,5m – 3,0m | -50÷150°C -58÷302°F | |
| SA6 | Perforated for air, inox steel cap "dimension Ø6x30mm" | PVC 1,5m - 3,0m | 0÷80°C 32÷176°F | |
| ST6 | Pipemount fitting | PVC 1,5m - 3,0m | 0÷80°C 32÷176°F | - |
| SC5.5 | Probe fixed with threaded male, inox steel cap "dimension Ø6x80mm" | PVC 1,5m - 3,0m | -30÷80°C -22÷176°F | |

Pt1000 PROBES

Pt1000 probes are suitable for all applications where the temperature is between -50÷120°C (-58÷248°F) and it is important to maintain precision over long distances.

| PROBE | DESCRIPTION | CABLE | TEMP. RANGE | |
|---------|---|------------------------------|------------------------|--------|
| PMG5P | Thermoplastic, resinated, IP68, cap "dimension Ø5x20mm" | Thermoplastic 1,5m - 3,0m | -50÷110°C -58÷230°F | |
| PMP4-67 | Pipemount fitting "Ø4÷Ø30mm in diameter", IP67, over-molded, copper sensor | Thermoplastic 1,5m - 3,0m | -50÷110°C -58÷230°F | 26 |
| PMT6-67 | Pipemount fitting "Ø4÷Ø30mm in diameter", IP67, over-molded, thermoplastic sensor | Thermoplastic 1,5m | -50÷120°C -58÷248°F | A 68.3 |

PRODUCT PROBE NTC/Pt1000

The product probes with NTC or Pt1000 sensors allow the simulation and display of product temperature and manage alarms according to the temperature near the product and not the air around it. Thanks to the magnets, these probes are particularly suitable for use on shelves.

| PROBE | DESCRIPTION | CABLE | TEMP. RANGE | |
|--------|---|---------------------|------------------------|--|
| NGPOP | NTC sensor, thermoplastic, IP68, 100x100mm | Thermoplastic 5m | -40÷110°C -40÷230°F | |
| PMGPOP | Pt1000 sensor, thermoplastic, IP68, 100x100mm | Thermoplastic 5m | -50÷120°C -58÷248°F | |

PTC/NTC INSERT PROBES

The insert probes with PTC or NTC sensor are suitable for applications where it is important to know the core temperature of goods. They are generally used together with cooking oven or blast chiller controllers.

| PROBE | DESCRIPTION | CABLE | TEMP. RANGE | |
|---------|--|-------------------------------------|------------------------|--|
| SPC10PS | PTC sensor, plastic handle, inox steel cap "dimension 03,5x100mm" | Silicone 3m | -38÷80°C -36÷176°F | |
| NPC10PS | NTC sensor, plastic handle, inox steel cap "dimension Ø3,5x100mm" | Silicone 3m | -30÷80°C -86÷176°F | |
| SPC10IS | PTC sensor, plastic handle, inox steel cap "dimension Ø3,5x100mm" | Silicone 3m | -50÷120°C -58÷248°F | |
| NPC10IS | NTC sensor, plastic handle, inox steel cap "dimension Ø3,5x100mm" | Silicone 3m | -50÷120°C -58÷248°F | |
| SPC10IA | PTC sensor, plastic handle, inox steel cap "dimension 03,5x100mm" | Silicone for use with food 3m | -50÷120°C -58÷248°F | |
| NPC10IA | NTC sensor, plastic handle, inox steel cap "dimension 03,5x100mm" | Silicone for use with food 3m | -50÷120°C -58÷248°F | |

Pt100 THERMORESISTORS

Thermoresistance (RTD) probes are suitable when a high precision and low response time is necessary. The operating range of the Pt100 sensor is from -70÷500°C (-94÷932°F), the precision is according to standard IEC751.

| PROBE | DESCRIPTION | CABLE | TEMP. RANGE | |
|-------|---|----------------|------------------------|---|
| PT6 | General purpose, 3 wires, inox steel cap "dimension 06x100mm" | PVC 2m | -30÷105°C -22÷221°F | |
| PT6.S | Protected, 3 wires, inox steel cap "dimension Ø6x100mm" | Silicone 2m | -60÷200°C -76÷392°F | |
| PT6.F | Protected, 3 wires, inox steel cap "dimension Ø6x100mm" | Vetrotex 2m | -60÷350°C -76÷662°F | CONTRACTOR |
| PT310 | Compact, with male connection, 2 wires, inox steel cap "dimension Ø3x100mm" | Silicone 2m | -70÷500°C -94÷932°F | |
| PT315 | Compact, with male connection, 2 wires, inox steel cap "dimension Ø3x150mm" | Silicone 2m | -70÷500°C -94÷932°F | |

TC THERMOCOUPLES

Thermcouple (TC) probes are suitable when a short response time and high shock resistance are necessary. The operating range of the TCJ sensor is from $0 \div 600^{\circ}$ C ($32 \div 1112^{\circ}$ F) and the range of the TCK is from $0 \div 1150^{\circ}$ C ($32 \div 2102^{\circ}$ F), the precision is according to standard IEC584-2.

| PROBE | DESCRIPTION | TEMP. RANGE | |
|--------|--|------------------------|-----|
| TJ6 | General purpose, protected, Fe-CO, cap "dimension Ø6x100mm", 2,0/3,0m vetrotex cable | 0÷350°C 32÷662°F | |
| TK6 | General purpose, protected, Cr–Al, cap "dimension Ø6x100mm", 2,0/3,0m vetrotex cable | 0÷350°C 32÷662°F | |
| TJD215 | DIN connector, Fe-CO, cap "dimension Ø2x150mm" | 0÷600°C 32÷1112°F | |
| TJD320 | DIN connector, Fe-CO, cap "dimension Ø3x200mm" | 0÷600°C 32÷1112°F | |
| TKD215 | DIN connector, Cr-Al, cap "dimension Ø2x150mm" | 0÷1150°C 32÷2102°F | |
| TKD320 | DIN connector, Cr-Al, cap "dimension Ø3x200mm" | 0÷1150°C 32÷2102°F | |
| СМЈ | Compensating female connector, Fe-CO, for TJD215 and TJD320 | -40÷200°C -40÷392°F | (3) |
| СМК | Compensating female connector, Cr-Al, for TKD215 and TKD320 | -40÷200°C -40÷392°F | -30 |

TEMPERATURE/HUMIDITY PROBES

Temperature/humidity probes for HVAC/R with DEW POINT calculation and RS485 output with ModBUS protocol. XH50P and XH55P are the ideal solution for anti-sweat heater control; these special probes, ideal for already existent plants, allow anti-sweat heater operation according to dew point conditions of the retail space. Through the correct calibration of Dixell algorithms, it is possible to obtain a proportional change of the operating voltage range of anti-sweat heaters, optimizing its consumption and increasing the energy saving on the average used power of the anti-sweat heaters.

dixell

EMERSON
Climate Technicogies

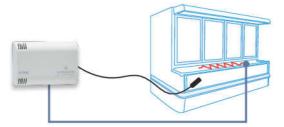
EMERSON
Charle Instrutuijes

- Available in 2 versions: XH50P (without knob), XH55P (with knob)
- · LED to display the device status
- Wall mounting (503 box dim. compatible)
- · Self extinguishing ABS housing

The XH50P and XH55P probes, depending on the actual needs, can be used stand-alone or in centralized applications combined with XM600 controllers for multiplexed cabinets and XWEB5000 supervising system.

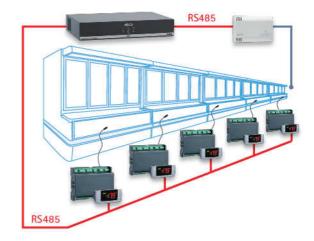
STAND-ALONE APPLICATION

- Based on the Dew Point estimate through the temperature and humidity measurement
- Thermostat control of anti-sweat heaters on a programmable value higher than the Dew Point
- Anti-sweat heaters control directly from XH

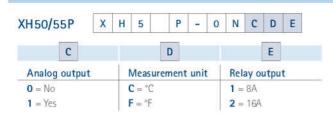


CENTRALIZED MANAGEMENT

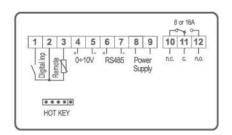
- Use of Dew Point sensors
- · Management of anti-sweat heaters set point through Supervising
- · Direct control of anti-sweat heaters from the counter controller
- · Possibility to manage regulation parameters in groups

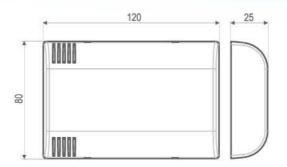


HOW to ORDER



| FEATURES | XH50P | XH55P |
|---------------------------|------------------------|------------------------|
| Knob | | pres |
| Power supply | 12÷24Vac/dc - 12÷40Vdc | 12÷24Vac/dc - 12÷40Vdc |
| Remote probe input | NTC | NTC |
| Digital input | free of voltage | free of voltage |
| Configurable relay output | 8A, 16A | 8A, 16A |
| Hot Key output | pres | pres |
| Serial output | RS485 | RS485 |
| Analog output | 0÷10V opt | 0÷10V opt |





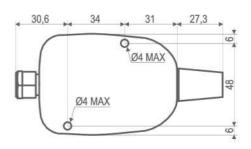
HUMIDITY PROBES

XH10P and XH20P humidity probes are suitable for all those applications where it is necessary to detect and control humidity. Such applications are: refrigeration, drying processes and more. Depending on the model, they supply a standard output current $(4 \div 20 \text{mA})$ or voltage $(0 \div 10 \text{V})$ signal. The high accuracy, the appropriate lead time and the sensor reliability also in cases with condensation, make these probes extremely effective.

- Wall mounting
- Power consumption: 22mA max
- Protection: IP65
- Operating range: humidity 30÷90% for XH10P and 0÷99% for XH20P







| FEATURES | XI | H10P | XI | H20P |
|-----------------------|---------------------|---------------------|---------------------|---------------------|
| Power supply | 9÷18Vdc | 15÷35Vdc - 12÷24Vac | 9÷18Vdc | 15÷35Vdc - 12÷24Vac |
| Output | 4÷20mA | 0÷10Vdc | 4÷20mA | 0÷10Vdc |
| Accuracy | ±5% | ±5% | ±3% | ±3% |
| Operating temperature | 0÷60°C (32÷140°F) | 0÷60°C (32÷140°F) | 0÷70°C (32÷158°F) | 0÷70°C (32÷158°F) |
| Storage temperature | -30÷85°C (22÷185°F) | -30÷85°C (22÷185°F) | -30÷85°C (22÷185°F) | -30÷85°C (22÷185°F) |
| Measurement range | 30÷90%RH | 30÷90%RH | 0÷99%RH | 0÷99%RH |

PRESSURE PROBES

PRESSURE TRANSDUCERS

Pressure transducers supply a standard output current signal (4÷20mA). The silicon sensor is assembled in a waterproof steel housing filled with oil that optimizes stable and constant measurement with additional protection against vibrations and a duration equivalent to millions of pressure cycles. The tip of the probe allows placement in contact with ammonia and various other kinds of corrosive gases.

| PP07 | 2 wires transducer with 4 \pm 20mA output and measurement range -0,5 \pm 7bar (male or female fitting) |
|------|--|
| PP11 | 2 wires transducer with 4 \pm 20mA output and measurement range $-0.5\pm$ 11bar (male or female fitting) |
| PP30 | 2 wires transducer with 4÷20mA output and measurement range 0÷30bar (male or female fitting) |
| PP50 | 2 wires transducer with 4÷20mA output and measurement range 0÷50bar (male or female fitting) |

FEATURES

| Power supply | 8÷28Vdc |
|--------------|---------|
| Output | 4÷20mA |
| Protection | IP65 |

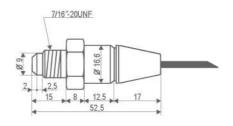
 Operating temperature
 -40±135°C (-40±275°F)

 Storage temperature
 -40±135°C (-40±275°F)

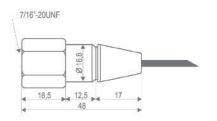
Accuracy 1% F.S.



MALE FITTING



FEMALE FITTING





RATIOMETRIC PRESSURE TRANSDUCERS

Pressure transducers supply a standard output ratiometric signal (0 \pm 5V). The design is ideal for demanding HVAC and refrigeration applications where long term reliability is necessary. The electrical interface is a rugged industry-accepted connector. This device maintains accuracy through a wide range of temperatures.

| PPR15 | 3 wires ratiometric transducer with 0±5V output and measurement range 0±15bar |
|-------|---|
| PPR30 | 3 wires ratiometric transducer with 0+5V output and measurement range 0+35bar |
| PPR45 | 3 wires ratiometric transducer with 0÷5V output and measurement range 0÷45bar |

FEATURES

 Power supply
 $4,5 \div 5,5 \lor dc$

 Output
 $0,5 \div 4,5 \lor dc$

 Protection
 IP65

 Operating temperature
 $-40 \div 135 \degree C (-40 \div 275 \degree F)$

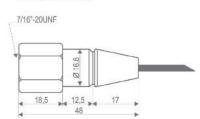
 Storage temperature
 -40÷135°C (-40÷275°F)

 -40÷135°C (-40÷275°F)
 -40÷135°C (-40÷275°F)

Accuracy 1,2% F.S.



FEMALE FITTING





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| USB key | XDL-KEY | 161 |
| Relay | T92 | 161 |
| | | |



ACCESSORIES

MODEM

IVIODEIV

MODEM and ANTENNA

| XWEB MODEM | For XWEB, IPG 115 and IPG215 | Analogue serial modern PDA compatible, 56kbps (DIN Rail format) HOW to ORDER: XWEBMODEM-200 (with 24Vac power supply) XWEBMODEM-400 (with 110Vac power supply) XWEBMODEM-500 (with 230Vac power supply) | = = = = = = = = = = = = = = = = = = = |
|------------|--|---|---------------------------------------|
| TC35-KIT | For XWEB300D/500D, XWEB500, IPG115 and IPG215 | GSM modem kit containing the modem, the power supply unit, the transmitting antenna with the relevant cable and the connection to controlling system | |
| XW-ANT | For XWEB300D/500D and IPL500D | GSM/GPRS antenna with magnetic base and 2,5m cable | |

ENERGY ANALYSERS

ENERGY ANALYSERS

| EM21D | Single/three-phase energy meter, CT-connected (5A), RS485 output. Self power supply. Dimensions: 71,7x71,7x64,6mm. DIN Rail or panel mounting. Housing: ABS self-extinguishing. Operating temperature: -25÷55°C (-13÷131°F). Relative humidity < 90% | 165432.1 318 |
|----------|--|-----------------|
| EM23D-1P | Single-phase energy meter, direct connected with integrated current transformers, with RS485 output. Current inputs 10(65)A, voltage 230VLN. Self power supply. Dimensions: 71,6x90x66,3mm. DIN Rail mounting. Housing: ABS self-extinguishing. Operating temperature: -25÷55°C (-13÷131°F). Relative humidity < 90% | G G G G |
| EM23D-3P | Three-phase energy meter, direct connected with integrated current transformers, with RS485 output. Current inputs 10(65)A, voltage 230VLN. Self power supply. Dimensions: 71,6x90x66,3mm. DIN Rail mounting. Housing: ABS self-extinguishing. Operating temperature: -25÷55°C (-13÷131°F). Relative humidity < 90% | . 23 |

| WM14D | Three-phase power analyser, with RS485 output. 90÷260Vac power supply. Dimensions: 107,5x90x63mm. DIN Rail and wall mounting. Housing: ABS self-extinguishing. Operating temperature: 0÷55°C (32÷131°F). Relative humidity < 90% | 200 (cd.) (cd.) |
|-------|---|--|
| WM22D | Single/three-phase power analyser 400Vac, with RS485 output. 230Vac power supply. Dimensions: 162,5x90x63mm. DIN Rail and wall mounting. Housing: ABS self-extinguishing. Operating temperature: 0÷55°C (32÷131°F). Relative humidity < 90% | ************************************** |

TRANSFORMERS for ANALYSERS

| TA100-5 | Current transformer to use with EMD21D and WM14D controllers. DIN Rail, bus-bar and wall mounting. Primary winding current 100A. Secondary winding current 5A | 禁 |
|---------|---|---|
| TA200-5 | Current transformer to use with EMD21D and WM14D controllers. DIN Rail, bus-bar and wall mounting. Primary winding current 200A. Secondary winding current 5A | |

WIRING

ETHERNET PATCH CABLES

| CAB/WEB/NET | For iPro and XWEB | Ethernet patch cable, 3m | |
|-------------|-------------------|-------------------------------------|--|
| CAB/WEB/PC | For iPro and XWEB | Ethernet patch cross over cable, 1m | |

WIRING for XC600CX

| CAB/CJ15 | For XC645CX, XC650CX and XC652CX | Connector with 1,5m wires for HP, DI inputs and analog outputs | |
|-----------|--|---|--------------|
| CAB/CJ30 | For XC645CX, XC650CX and XC652CX | Connector with 3m wires for HP, DI inputs and analog outputs | |
| CW15-KIT | For XC650CX and XC652CX | 2 disconnectable female connectors, 12–14 pins with wires 1,5m | |
| CW25-KIT | For XC650CX and XC652CX | 2 disconnectable female connectors, 12-14 pins with wires 2,5m | THE PARTY OF |
| CWC15-KIT | For XC645CX | 2 disconnectable female connectors, 6–14 pins with wires 1,5m, for models with internal triac | MINIM |
| CWC30-KIT | For XC645CX | 2 disconnectable female connectors, 6–14 pins with wires 3m, for models with internal triac | |

WIRING for XEV and iPro

| DWXEV30 | For XEV20D | 1 disconnectable female connector, 12 pins with wires 3m | ARMAN |
|---------------|----------------------------|---|------------|
| DWS30-KIT | For IPG108D and IPG108E | 2 disconnectable female connectors, 12-16 pins with wires 3m | WW |
| DWEX306-30KIT | For IPX306D | 2 disconnectable female connectors, 10-16 pins with wires 3m | *** |
| DWB30-KIT | For IPG115D | 3+3 disconnectable female connectors, 6-8-10 pins and 10-16-22 pins with wires 3m | |
| DWEX60-30KIT | For IPX106D | 1+2 disconnectable female connectors, 8 and 10-16 pins with wires 3m | AMPA MANAL |

| | _ | | |
|--------------|--|---|--|
| DWX115-30KIT | For IPX115D | 3+3 disconnectable female connectors, 6-8-10 pins and 10-16-22 pins with wires 3m | |
| DWEX70-30KIT | For IPX125D | 5+3 disconnectable female connectors, 6-6-8-8-10 pins and 10-16-22 pins with wires 3m | de s |
| IP-FC108 | For IPG108D and IPG108E | 1+1 screw female connectors, 7 and 12 pins | pure Propensions |
| IP-FC208 | For IPG208D, IPG208E and IPR208D | 1+1 screw female connectors, 7 and 12 pins and 2 bayonet female connectors 12-16 pins | SHAPE STATE OF THE |
| IP-FC215CP | For IPG215D, IPG215F and IPR215D | 6 screw female connectors, 2-3(x2)-6-7-8 pins and 3 bayonet female connectors 10-16-22 pins | |
| IP-FCEX60 | For IPX206D | 1 screw female connector, 12 pins and 2 bayonet female connectors 10–16 pins | |
| IP-FCX215 | For IPX215D | 6 screw female connectors, 2-3(x2)-6-7-8 pins and 3 bayonet female connectors 10-16-22 pins | |
| IP-FCEX70 | For IPX225D | 9 screw female connectors, 2-3(x3)-5-6(x2)-7-8 pins and 3 bayonet female connectors 10-16-22 pins | |
| IP-FC500 | For IPL500D | 2 screw female connectors 2-9 pins | |
| | | IV. | |

PROGRAMMING



PROGRAMMING TOOL

| WIZMATE PROG-TOOL KIT | Programming kit made up of CD and DIN RAIL module (PROG-TOOL) with connections for Hot Key and RS485 for Dixell instruments; it allows the user to connect controllers to a PC running Windows 2000/XP OS. The CD-rom includes: WIZMATE (to program an instrument or a Hot Key).The Kit includes: the CAB/PTK2 wire for DIN module instrument connection, the CAB/PTK485 wire for DIN module RS485 (built-in) instrument connection, the RS232-USB-CONV converter for PC connections HOW to ORDER: WIZMATE PROG-TOOL KIT 110V (with 110Vac power supply) WIZMATE PROG-TOOL KIT 230V (with 230Vac power supply) | CAAL CAAL CAAL CAAL CAAL CAAL CAAL CAAL |
|--------------------------|---|---|
| XJ485USB-KIT | The USB to RS485 serial converter (2 wires) is the perfect choice to interface any computer, equipped with WIZMATE® software and a USB port, to a network of instruments. XJ485USB is only 78x40x22mm and supports different communication speeds in the range from 300 to 19200bps. The kit includes the USB cable type A-B, 1,5m and a USB with the drivers for the main operative systems (Microsoft Windows, Linux, MAC OS) and a WIZMATE® software version | |

PROGRAMMING KEYS

| HOT KEY | Key for a quick and easy Dixell's controllers programming. Dimensions 0,8x16x46mm | |
|-------------|--|--|
| HOT KEY 128 | Key for a quick and easy XB570L controller programming. Dimensions 0,8x16x46mm | |
| VISOKEY | Programming key for Visograph keyboard. Dimensions 0,8x16x46mm | |
| PROG KEY | Programming key for firmware update. Dimensions 0,8x16x46mm | |

GATEWAY

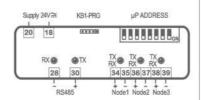
GATEWAY for M-BUS METERS

M-Bus - ModBUS-RTU Slave protocol converter, used to centralize and read the consumption data of the energy meters (electricity, gas or water). i-METER is ideal for monitoring energy consumption and control of system leaks.

i-METER

Housing: 8 DIN Protection: IP50 Connections: screw terminals Power supply: 24 Vac/dc ± 10% N° of nodes that can be connected: max 3

Certified models: ISTA (Istameter, Domaqua, Sensonic II)





REMOTE DISPLAY

REMOTE DISPLAY

Remote display for temperature reading to be used with compatible Dixell's controllers. The front panel is IP65 and makes the installation easy wherever the controlled temperature needs to be displayed. Display: n° digits ± 3 d.p.
Power Supply: from the controller
HOW to ORDER: X-REP-00000 X-REP

X-REP-10000 (for XJA, XJP)



CABLES for REMOTE DISPLAY

| CAB/REP1 | Multipolar connector for X-REP, 1m; to use with WING, XM, XB series | |
|----------|---|---|
| CAB/REP3 | Multipolar connector for X-REP, 3m; to use with WING, XM, XB series | |
| CAB/REP5 | Multipolar connector for X-REP, 5m; to use with WING, XM, XB series | |
| CAB51F | Cable for X-REP, 1m; to use with XJA, XJP and PRIME CX series | 8 |
| CAB52F | Cable for X-REP, 2m; to use with XJA, XJP and PRIME CX series | |
| CAB55F | Cable for X-REP, 5m; to use with XJA, XJP and PRIME CX series | |



VARIOUS

PRINTER

XB07PR

Compact thermal printer designed for connection to the XB570L controller. It provides a hard copy print out of the cycles. Paper width 58mm. EASYLOCK fixing system that allows to adapt the printer to the panel thickness without further supports. Operating Voltage range: 3.5÷8V. Dimensions: 85.5x85x55mm





ADAPTERS

| | | 9 |
|---------|---|---|
| C-BOX | Wall adapter for C and CX format controllers, IP55, dimensions: 108x108x90mm | |
| C-BOX2 | Wall adapter for C and CX format controllers, IP55, dimensions: 170x105x82mm | |
| VS-BOX | Wall adapter for VS format controllers, IP55, dimensions: 135x74x72mm | |
| VS-BOX2 | Wall adapter for VS format controllers, IP55, dimensions: 170x105x82mm | |
| V-KIT/W | Wall adapter for vertical keyboards, IP55, dimensions: 100x64x43mm, white colour | |
| V-KIT/B | Wall adapter for vertical keyboards, IP55, dimensions: 100x64x43mm, black colour | |
| FA64 | Frame adapter for smaller 31x64mm models to fit larger 32x74mm instrument cut outs | |
| FA/CX | Multifunction frame adapter from L to CX format controllers with the possibility to mount up to 2 CXLS light switches | |

FILTERS

| FT-IL | Inductive load filter 0,1μF/1000hm 250V | |
|-------|---|--|
| FT-PW | Line filter | |

GASKETS and PROTECTIONS

| MDP/CX | Plastic protection for C and CX formats against dripping on terminal blocks | |
|--------|---|--|
| RG-C | Front panel rubber gasket for C format, IP65 mounting | |
| RG-L | Front panel rubber gasket for L format (STANDARD), IP65 mounting | |
| RG-LX | Front panel rubber gasket for L format (INOX), IP65 mounting | |
| RG-V | Front panel rubber gasket for V format, IP65 mounting | |
| PG-L | Plastic multipurpose protection for L format, IP65 | |

FIXING SYSTEMS

| PM-WL | Patented fixing system (Design Patent: UAMI n. 001851916-0001) for a simple and easy to mount solution suitable for any metallic flat surface for WING-L INOX and BACK-PANEL controllers with polycarbonate. The kit is composed of one adhesive bracket and counter plastic bracket | |
|--------|--|-----|
| PM-WLT | Patented fixing system (Design Patent: UAMI n. 001851916-0001) for a simple and easy to mount solution suitable for any metallic flat surface for WING-L TOUCH controllers. The kit is composed of one adhesive bracket and counter plastic bracket | |
| XW-WA | Wall mounting bracket for XWEB500 | 111 |

TRANSFORMERS

| TF3 | The TF3 3VA model is available in the following versions: 230/12Vac, 110/12Vac and 24/12Vac. Others models with internal thermofuse (130°C) and UL, CSA, VDE approval are available | 2 |
|-------|---|---|
| TF5 | The TF5 5VA model is available in the following versions: 230/12Vac, 110/12Vac and 24/12Vac | |
| TF10 | The TF10 10VA model is available in the following versions: 230/12Vac, 110/12Vac and 24/12Vac | |
| TF10D | The TF10D (DIN Rail mounting) 10VA model is available in the following versions: 230/24Vac and 110/24Vac. 2 DIN Rail format | |
| TF20D | The TF20D (DIN Rail mounting) 20VA model is available in the following versions: 230/24Vac and 110/24Vac. 3 DIN Rail format | |
| TF40D | The TF40D (DIN Rail mounting) 40VA model is available in the following versions: 230/24Vac and 110/24Vac. 4 DIN Rail format | |

LIGHT SWITCHES

| LS-R | Red light switch 16A/250Vac | |
|--------|--|-----|
| LS-G | Green light switch 16A/250Vac | |
| LS-Y | Yellow light switch 16A/250Vac | |
| CXLS-R | Red light switch 16A/250Vac for FA/CX | |
| CXLS-G | Green light switch 16A/250Vac for FA/CX | |
| CXLS-Y | Yellow light switch 16A/250Vac for FA/CX | |
| WLS-R | Red light switch 16A/250Vac for WING Series | |
| WLS-G | Green light switch 16A/250Vac for WING Series | = 1 |
| WLS-Y | Yellow light switch 16A/250Vac for WING Series | |

CABLES

| CAB/KB11 | 1m cable to connect the keyboard and the XEV driver or the XJA-XJP-XJR modules | |
|---------------|--|--|
| CAB/USB10 | USB extended cable, 1m with plastic cap for XW737K and XW777K | |
| САВ/НК | Adapter cable, 5 pins for Hot Key input, 0,5m for XC10CX and XC30CX | |
| CAB/485-TGIPG | Cable for RS485 connection with connector for TGIPG | |

CONNECTORS

| XM-FC16 | Female connector kit, 16 pins for XM660K and XM670K | |
|---------|---|--|
| XM-FC21 | Female connector kit, 21 pins for XM669K and XM679K | |
| XM-FC26 | Female connector kit, 26 pins for XM668K and XM678K | |

SERIAL INTERFACE

| DETROITE HATELING | | |
|-------------------|---|--|
| XJ485CX | The serial interface converts the TTL output into an RS485 signal that can be used to connect the unit to the controlling and supervising system. Dimensions: 1,6x16x46mm. Multipolar connector included, 0,2m | |

USB CONVERTER

| USB-ETH-CONV | USB-Ethernet adapter for iPro programmable controllers in 4 DIN Rail format | |
|--------------|---|--|
|--------------|---|--|

CLOCK BOARD

| XM-RTC | Standard clock board for XM series | |
|--------|------------------------------------|--|
|--------|------------------------------------|--|

BATTERIES

| ВА6Н | Battery for XJDL40D of 1.2Ah 6 hours of backup | |
|-------|--|--|
| BA24H | Battery for XJDL40D of 4.0Ah 24 hours of back-up | |

ANTI-CONDENSING KIT

| XV-ACK | Anti-condensing kit for XV110K and XV150K models | |
|--------|--|--|
|--------|--|--|

POWER SUPPLIERS

| PW-DL | Power supplier (24, 230Vac) for XDL01 module (with CAB/DL2 cable, 2m included) that works as a gateway between the XDL01 and Dixell instruments equipped with TTL or RS485 serial output HOW to ORDER: PW-DL-20000 (for 24Vac) PW-DL-50000 (for 230Vac) | 200 |
|----------|---|-----|
| TF-TGIPG | Power supplier 24Vdc/1A for TGIPG | |
| PW200J | Power supplier for XJ200 modules with TTL-RS485 converter | des |

USB KEY

| XDL-KEY | USB key for XDL01, XW737K and XW777K | dixal |
|---------|--------------------------------------|-------|
|---------|--------------------------------------|-------|

RELAY

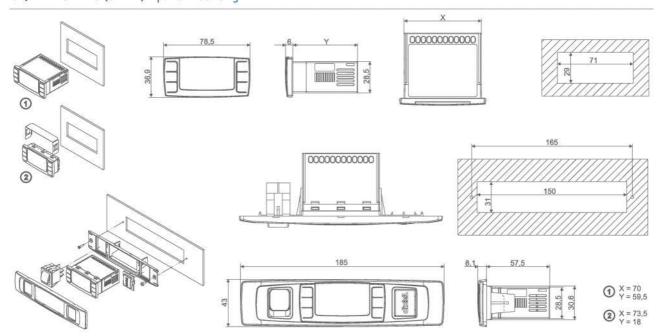
| T92 | Relay with a 30A current (3 HP/240Vac or 1HP/110Vac) suitable for all those applications where the load current is higher than the rating value of the relays mounted on the instruments. Contacts: 2C/O - 2N/O. Rated current: 30/3 (NO/NC). Rated/max. voltage: 250/480Vac. Rated breaking capacity: 7500VA. Nominal coil voltage: 240Vac. Nominal coil power: 1.7W/4VA. Coil contact: fast-on: 8mm. Dimensions: 30,5x52,3x34,6mm. Ambient temperature: -40÷65°C (-40÷149°F) | 1 NO.54 Corner Corner Corner 3 4 | .e. — No as 2017es 2 |
|-----|--|----------------------------------|----------------------|
|-----|--|----------------------------------|----------------------|

SIMILI ATORS

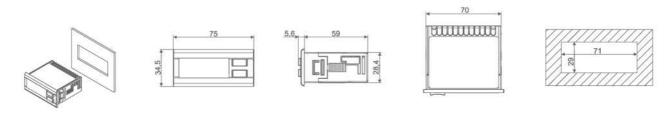
| KIT SIMULATORE IPG108 | Simulator of inputs and outputs is suitable to test the applications developed for the IPG 108 programmable controllers. Thanks to a resistant aluminum frame, its compact dimensions 560x340x85mm, a complete series of wirings and versatile enclosure, it can be utilized in every situation. The simulator has a 230Vac power supply | |
|---------------------------|--|--|
| KIT SIMULATORE IPG115D | Simulator of inputs and outputs is suitable to test the applications developed for the IPG115 programmable controllers. Thanks to a resistant aluminum frame, its compact dimensions 560x340x85mm, a complete series of wirings and versatile enclosure, it can be utilized in every situation. The simulator has a 230Vac power supply | |

DIMENSIONS & CUT OUT

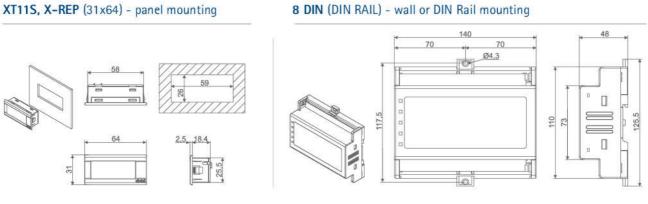
CX, KEYBOARDS (32x74) - panel mounting



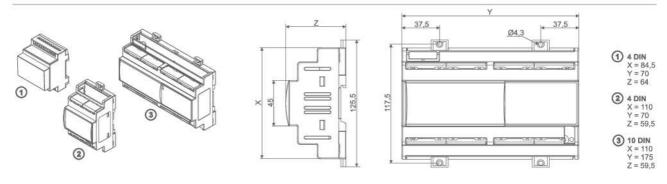
C (32x74) - panel mounting



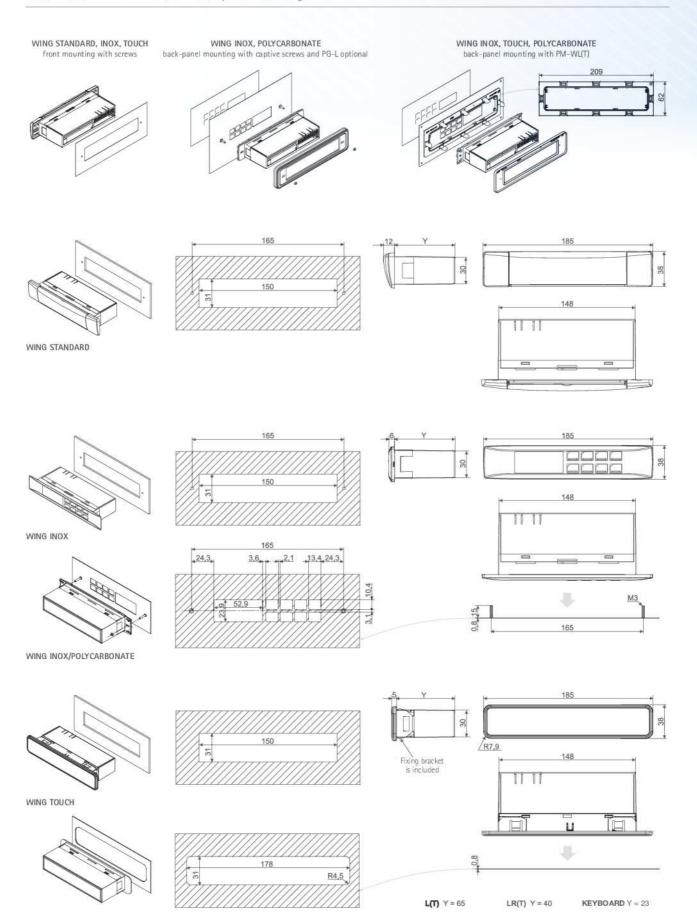
XT11S, X-REP (31x64) - panel mounting



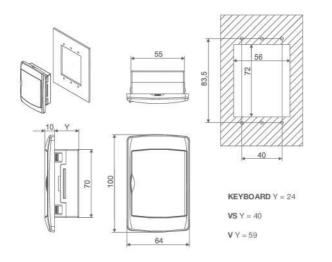
4, 10 DIN (DIN RAIL) - wall or DIN Rail mounting



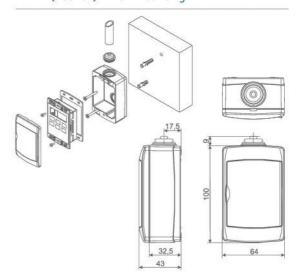
L(T), LR(T), KEYBOARDS (38x185) - panel mounting



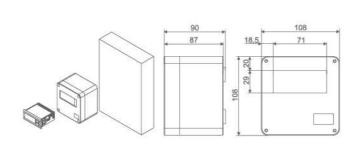
V, VS, KEYBOARDS (100x64) - panel mounting



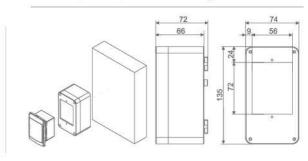
V-KIT (100x64) - wall mounting



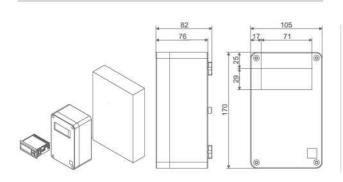
C-BOX (108x108) - wall mounting



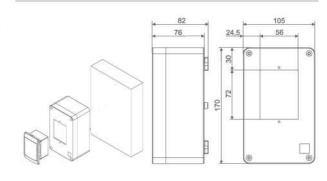
VS-BOX (135x74) - wall mounting



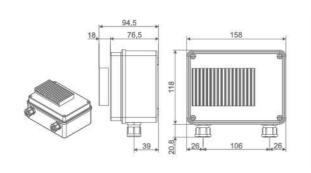
C-BOX2 (170x105) - wall mounting



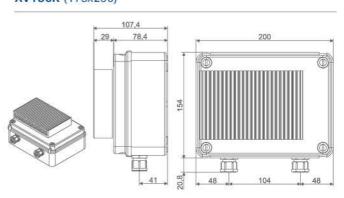
VS-BOX2 (170x105) - wall mounting



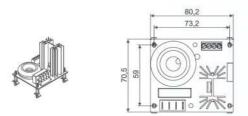
XV110K (139x158)

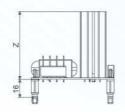


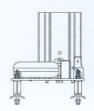
XV150K (175x200)



PK (80x70) - panel mounting

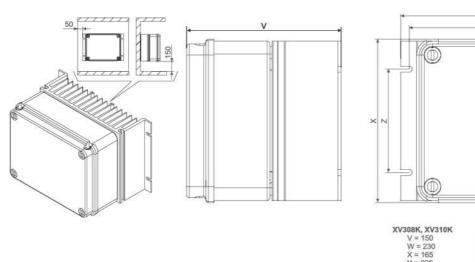


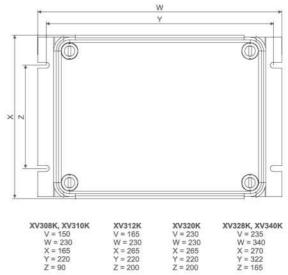




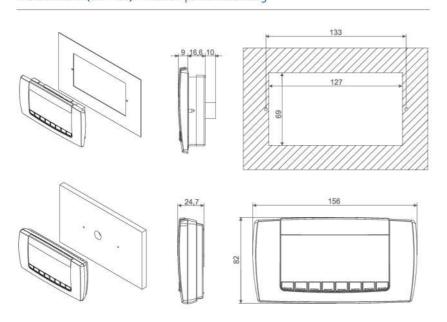
XV05PK Z = 26,5 XV10PK Z = 43,5 XV22PK Z = 65,5

XV300K - wall mounting

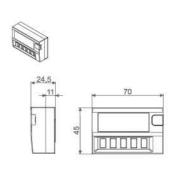




VISOGRAPH (82x156) - wall or panel mounting

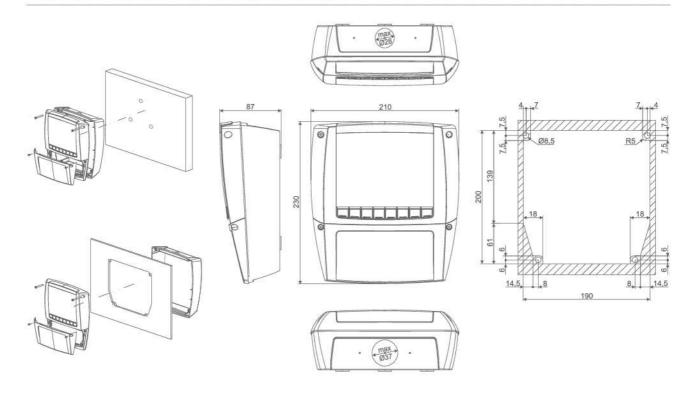


XDL (45x70) - wall mounting

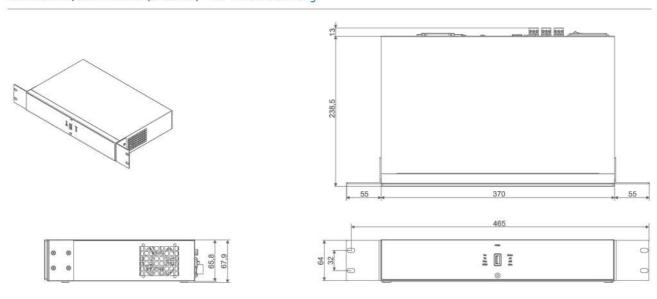


and the same

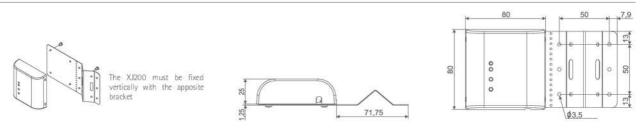
XLR, XLH, XWEB500 (230x210) - wall or panel mounting

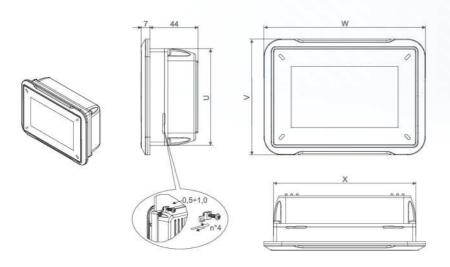


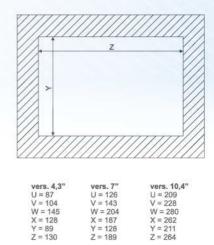
XWEB3000, XWEB5000 (370x238) - 19" RACK mounting



XJ200 (80x80) - wall or pipemount or shelves mounting







GENERAL TECHNICAL FEATURES

The following technical features are ordinary for the products present in this catalogue, other main features can be found on the preliminary section of the series.

| Housing | self extinguishing ABS |
|---|---|
| Front protection (with gasket, if available) | S format ⇒ IP65 C, CX formats and CX keyboards ⇒ IP65 L(T), LR(T) formats and WING horizontal keyboards ⇒ IP65 V, VS formats and WING vertical keyboards ⇒ IP65 XLR, XLH formats ⇒ IP65 4, 8, 10 DIN formats ⇒ IP20 VG format ⇒ IP65 XDL ⇒ IP30 TGIPG ⇒ IP65 XJ200 ⇒ IP30 |
| Accuracy | better than 1% of F.S. |
| Data storage | EEPROM memory |
| Operating temperature | 0÷60°C (32÷140°F) |
| Storage temperature | -30÷85°C (22÷185°F) |
| Relative humidity | 20÷85% |
| Resolution | 0,1°C or 1°F |





